ORGANICS CHEMISTRY

Completeness

Organics data are reported for samples *9209-1* through *9209-11* and *9316-1* through *9316-3*. These samples were analyzed for chlorinated pesticides, polychlorinated biphenyls (PCBs), and base/neutral/acid extractable semivolatile compounds (BNAs) in association with the complete set of QC samples outlined in Table 2. Additionally, samples 9209-1 through 9209-11 were analyzed for volatile organic compounds (VOAs).

Methods

Analysis of chlorinated pesticides and PCBs was performed in accordance with EPA method 8080 (SW-846). Analysis of VOAs was performed in accordance with EPA method 8260 (SW-846). Analysis of BNAs was performed in accordance with EPA method 8270 (SW-846). BNA extracts were also analyzed by selected ion monitoring (SIM) to attain lower detection limits for chlorinated benzene compounds.

Target List

The reported BNA target list includes all compounds specified in *Table 1 - Marine Sediment Quality Standards Chemical Criteria* contained in Chapter 173-204 WAC, with the exception of benzo(j)fluoranthene. The KC Laboratory has verified that analytical conditions are sufficient to calculate a total benzofluoranthenes result using the reported *b* and *k* isomers. Reported PCB data include Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260. The reported chlorinated pesticides target list includes all compounds found on the PSDDA *Chemicals of Concern* list. DDT, DDE and DDD have been reported as 4,4' isomers.

Detection Limits, Units, and Significant Figures

Data are reported in accordance with laboratory policy at the time the data were generated. A positive result and/or MDL and RDL have been reported for all organic compounds. Sample results are reported in units of ug/Kg on a dry weight basis. Data are reported to three significant figures for results greater than the RDL and two significant figures for results equal to or less than the RDL. For results reported with less than two or three significant figures, significant zeroes are implied.

Storage Conditions and Holding Times

Sample storage conditions and holding times have been evaluated using guidelines established during the Third Annual PSDDA Review Meeting. The criteria used to evaluate storage conditions and holding times for organics analyses are listed in the table below.

Parameter	Frozen Holding Time	Refrigerated Holding Time
Pest/PCBs	1 Year to Extract 40 Days to Analyze	14 Days to Extract 40 Days to Analyze
BNAs	1 Year to Extract 40 Days to Analyze	14 Days to Extract 40 Days to Analyze
VOAs	Not Recommended	14 Days to Analyze

Sample storage conditions and holding times were met for all Pesticide/PCB, BNA, and Chlorobenzene samples in this data submission. VOA samples 9209-2 through 9209-9 and 9209-11 were analyzed one day out of holding time. Associated sample results have been qualified with the *H* flag.

Method Blanks

All chlorinated pesticide/PCB, chlorobenzene, and BNA method blank results were less than the MDL. Acetone was detected in the VOA method blank associated with samples 9209-1 through 9209-11. Associated acetone sample data have been qualified with the *B* flag.

Surrogate Recoveries

All surrogate recoveries for chlorinated pesticide/PCBs and VOAs were within acceptable QC limits.

BNA sample data are qualified when the average surrogate recovery for either or both the acid and base/neutral fractions are outside QC limits. Sample 9316-3 had an average surrogate less than 50% for both the base/neutral and acid fractions. Associated sample data have been qualified with the *G* flag.

Chlorobenzene sample data are qualified when the single surrogate recovery is outside QC limits. Samples 9209-9 and 9316-1 through 9316-3 have been qualified with the *G* flag based on surrogate recoveries less than 50%.

Standard Reference Material

The marine sediment SRM analyzed in association with the chlorinated pesticide/PCB analysis normally is 1941a, certified by the National Institute of Standards and Technology. There was no SRM associated with chlorinated pesticide/PCB analysis in this data submission. An SRM is not included during SIM analysis of chlorobenzene compounds. An SRM is not included during VOA analysis.

The marine sediment SRM analyzed in association with the reported BNA analytical results is HS4, certified by the National Research Council of Canada. HS4 contains a partial list of compounds for BNA analysis. BNA data for all samples in this data submission have been qualified based on the SRM recoveries summarized in the following table.

Samples 9209-1 through 9209-11, 9316-1 through 9316-3

Compound	% Recovery	Flag
Napthalene	12	G
Fluorene	42	G
Phenanthrene	40	G
Anthracene	31	G
Fluoranthene	45	G
Pyrene	50	G
Benzo(a)anthracene	56	G
Benzo(k)fluoranthene	66	G
Benzo(a)pyrene	47	G
Indeno(1,2,3-cd)pyrene	47	G
Benzo(g,h,i)perylene	45	G

Matrix Spike

Chlorinated pesticide/PCB data did not require any qualification based upon associated matrix spike results.

BNA data for samples 9209-1 through 9209-8 and 9209-10 through 9209-11 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
Phenol	43	G
bis(2-Chloroethyl) Ether	41	G
2-Chlorophenol	40	G
2-Methylphenol	43	G
bis(2-Chloroisopropyl) Ether	39	G
4-Methylphenol	45	G
N-Nitroso-di-n-propylamine	37	G
Hexachloroethane	37	G
Nitrobenzene	41	G
Isophorone	39	G
2-Nitrophenol	40	G
2,4-Dimethylphenol	29	G
2,4-Dichlorophenol	49	G
Napthalene	41	G
4-Chloroaniline	17	G
bis(2-Chloroethoxy) methane	40	G
Hexachlorobutadiene	39	G
2-Methylnapthalene	44	G
Hexachlorocyclopentadiene	17	G
2-Chloronapthalene	49	G
3-Nitroaniline	33	G
2,4-Dinitrophenol	36	G
Pentachlorophenal	27	G
Benzidine	0	X
3,3'-Dichlorobenzidine	24	G
N-Nitrosodimethylamine	40	G
Aniline	12	G
Benzyl alcohol	40	G
Benzoic acid	165	L

BNA data for sample 9209-9 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
bis(2-Chloroethyl) Ether	34	G
Hexachloroethane	48	G
4-Chloroaniline	20	G
Hexachlorocyclopentadiene	35	G
3-Nitroaniline	49	G
Pentachlorophenal	42	G
Benzidine	0	X
3,3'-Dichlorobenzidine	37	G
N-Nitrosodimethylamine	42	G
Aniline	46	G

BNA data for samples 9316-1 through 9316-3 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
N-Nitrosodimethylamine	35	G
Hexachloroethane	44	G
Hexachlorobutadiene	49	G
Hexachlorocyclopentadiene	43	G
Benzidine	0	X
Pentachlorophenal	20	G
Aniline	22	G
3,3'-Dichlorobenzidine	32	G
4-Chloroaniline	30	G

Chlorobenzene data for samples 9209-1 through 9209-8 and 9209-10 through 9209-11 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
1,3-Dichlorobenzene	42	G
1,4-Dichlorobenzene	38	G
1,2-Dichlorobenzene	33	G
1,2,4-Trichlorobenzene	42	G

Chlorobenzene data for samples 9209-9 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
1,3-Dichlorobenzene	48	G
1,4-Dichlorobenzene	41	G
1,2-Dichlorobenzene	47	G

Chlorobenzene data for samples 9316-1 through 9316-3 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
1,3-Dichlorobenzene	45	G
1,4-Dichlorobenzene	39	G
1,2-Dichlorobenzene	44	G

VOA data for samples 9209-1 through 9209-11 have been qualified based on the matrix spike recoveries summarized in the following table.

Compound	% Recovery	Flag
Acrolein	0	X
Vinyl Acetate	0	X

Laboratory Replicate Samples

The RPD results for all chlorinated pesticide/PCB, chlorobenzene, and VOA laboratory duplicate samples were less than the QC limit of 100%.

Pentachlorophenol data for samples 9209-1 through 9209-8, and 9209-10, and 9209-11 have been qualified with the *E* flag based on laboratory duplicate sample results with an RPD greater than 100%.

Coprostanol data for samples 9316-1 through 9316-3 have been qualified with the *E* flag based on a laboratory duplicate result with an RPD greater than 100%.

TABLE 1
PIER 53 SEDIMENT CAP STUDY
SAMPLE INVENTORY

Sample	BNAs	Pesticides and PCBs	Chloro Benzenes	VOAs	Metals	Mercury	TOC	Total Solids	PSD	Comments
9209-1	X	X	X	X	X	X	X	X	X	
9209-2	X	X	X	X	X	X	X	X	X	
9209-3	X	X	X	X	X	X	X	X	X	
9209-4	X	X	X	X	X	X	X	X	X	
9209-5	X	X	X	X	X	X	X	X	X	
9209-6	X	X	X	X	X	X	X	X	X	
9209-7	X	X	X	X	X	X	X	X	X	
9209-8	X	X	X	X	X	X	X	X	X	
9209-9	X	X	X	X	X	X	X	X	X	
9209-10	X	X	X	X	X	X	X	X	X	
9209-11	X	X	X	X	X	X	X	X	X	Field Replicate
9316-1	X	X	X		X	X	X	X	X	
9316-2	X	X	X		X	X	X	X	X	
9316-3	X	X	X		X	X	X	X	X	

TABLE 2
QC SAMPLE FREQUENCY FOR SEDIMENT CHEMISTRY PARAMETERS

Parameter	Blank	Duplicate	Triplicate	Matrix Spike	SRM	Surrogate
Particle Size Distribution	NA	10% of Samples	10% of Samples	NA	NA	NA
Total Solids	NA	5% Minimum, 1 Per Batch	5% Minimum, 1 Per Batch	NA	NA	NA
Total Organic Carbon	1 Per Batch	5% Minimum, 1 Per Batch	5% Minimum, 1 Per Batch	NA	1 Per Batch	NA
Mercury	1 Per Batch	5% Minimum, 1 Per Batch	NA	5% Minimum, 1 Per Batch	1 Per Batch	NA
Metals	1 Per Batch	5% Minimum, 1 Per Batch	NA	5% Minimum, 1 Per Batch	1 Per Batch	NA
BNAs	1 Per Batch	5% Min., 1 Per Extr. Batch	1 Per Batch of > 20 Samples	5% Min., 1 Per Extr. Batch	1 Per Extraction Batch	Yes
Chlorinated Pesticides and PCBs	1 Per Batch	5% Min., 1 Per Extr. Batch	1 Per Batch of > 20 Samples	5% Min., 1 Per Extr. Batch	1 Per Extraction Batch	Yes
VOAs	1 Per Batch	5% Min., 1 Per Extr. Batch	1 Per Batch of > 20 Samples	5% Min., 1 Per Extr. Batch	NA	Yes
Chlorobenzenes	1 Per Batch	5% Min., 1 Per Extr. Batch	1 Per Batch of > 20 Samples	5% Min., 1 Per Extr. Batch	NA	Yes

TABLE 3
SUMMARY OF DATA QUALIFIERS

Condition to Qualify	METRO Data Qualifier	Organics QC Limits	Metals QC Limits	Conventionals QC Limits	Comment
very low matrix spike recovery	X	< 10 %	< 10 %	NA	
low matrix spike recovery	G	< 50%	< 75%	NA	
high matrix spike recovery	L	> 150%	>125%	NA	
low SRM recovery	G	< 80%*	NA	< 80%*	
high SRM recovery	L	>120%*	>120%	>120%*	
high duplicate RPD	E	>100 %	>20%	> 20 %	use duplicate is routine QC for organics
high triplicate RSD	E	> 100%	NA	> 20 %	use triplicate is routine QC for conventionals
less than the reporting detection limit	< RDL	NA	NA	NA	
less than the method detection limit	< MDL	NA	NA	NA	
contamination reported in blank	B	> MDL	> MDL	> MDL	
very biased data, based on surrogate recoveries	X	all fraction surrogates are <10%	NA	NA	use average surrogate recovery for BNA
biased data, based on low surrogate recoveries	G	all fraction surrogates are < 50%	NA	NA	use average surrogate recovery for BNA
biased data, based on high surrogate recoveries	L	all fraction surrogates are >150%	NA	NA	use average surrogate recovery for BNA
estimate based on presumptive evidence	J# used to indicate the presence of TIC's	NA	NA	NA	
rejected, unusable for all purposes	R	NA	NA	NA	
a sample handling criteria has been exceeded	H	NA	NA	NA	includes container, preservation, hold time, sampling technique

*Note that PSDDA guidance uses a 95% confidence window for this parameter/qualification

APPENDIX C

CHEMISTRY DATA

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG1				Locator:	P53VG2				Locator:	P53VG3			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-1				Lab ID:	L9209-2				Lab ID:	L9209-3			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	65.7				% Solids:	60.4				% Solids:	58.4			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Bass		
ORGANICS															
M.Code=SW-846 8080															
4,4'-DDD		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
4,4'-DDE		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
4,4'-DDT		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Aldrin		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Alpha-BHC		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Aroclor 1016		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1221		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1232		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1242		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1248		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1254		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
Aroclor 1260		<MDL	20	40.6	ug/Kg	36	<RDL	22	44.2	ug/Kg	26	<RDL	22	45.7	ug/Kg
Beta-BHC		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Chlordane		<MDL	10	20.2	ug/Kg		<MDL	11	22	ug/Kg		<MDL	11	22.8	ug/Kg
Delta-BHC		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Dieldrin		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Endosulfan I		<MDL	2	4.06	ug/Kg	3.8	<RDL	2.2	4.42	ug/Kg	4.3	<RDL	2.2	4.57	ug/Kg
Endosulfan II		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Endosulfan Sulfate		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Endrin		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Endrin Aldehyde		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Gamma-BHC (Lindane)		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Heptachlor		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Heptachlor Epoxide		<MDL	2	4.06	ug/Kg		<MDL	2.2	4.42	ug/Kg		<MDL	2.2	4.57	ug/Kg
Methoxychlor		<MDL	10	20.2	ug/Kg		<MDL	11	22	ug/Kg		<MDL	11	22.8	ug/Kg
Toxaphene		<MDL	20	40.6	ug/Kg		<MDL	22	44.2	ug/Kg		<MDL	22	45.7	ug/Kg
M.Code=SW-846 8260															
1,1,1-Trichloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,1,2-Trichloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,1,2-Trichloroethylene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,1-Dichloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,1-Dichloroethylene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,2-Dichloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
1,2-Dichloropropane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
2-Butanone (MEK)		<MDL	38	76.1	ug/Kg		<MDL,H	41	82.8	ug/Kg		<MDL,H	43	85.6	ug/Kg
2-Chloroethylvinyl ether		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG1	Locator:	P53VG2	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-1	Lab ID:	L9209-2	Lab ID:	L9209-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	65.7	% Solids:	60.4	% Solids:	58.4

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Hexanone		<MDL	38	76.1	ug/Kg		<MDL,H	41	82.8	ug/Kg		<MDL,H	43	85.6	ug/Kg
4-Methyl-2-Pentanone (MIBK)		<MDL	38	76.1	ug/Kg		<MDL,H	41	82.8	ug/Kg		<MDL,H	43	85.6	ug/Kg
Acetone	72	<RDL,B	20	76.1	ug/Kg	99.7	B,H	22	82.8	ug/Kg	98.5	B,H	22	85.6	ug/Kg
Acrolein		<MDL,X	38	76.1	ug/Kg		<MDL,X,H	41	82.8	ug/Kg		<MDL,X,H	43	85.6	ug/Kg
Acrylonitrile		<MDL	38	76.1	ug/Kg		<MDL,H	41	82.8	ug/Kg		<MDL,H	43	85.6	ug/Kg
Benzene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Bromodichloromethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Bromoform		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Bromomethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Carbon Disulfide		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Carbon Tetrachloride		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chlorobenzene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chlorodibromomethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chloroethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chloroform		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chloromethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Chloromethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Cis-1,3-Dichloropropene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Ethylbenzene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Methylene Chloride		<MDL	7.6	76.1	ug/Kg		<MDL,H	8.3	82.8	ug/Kg		<MDL,H	8.6	85.6	ug/Kg
Styrene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Tetrachloroethylene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Toluene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Total Xylenes		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Trans-1,2-Dichloroethylene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Trans-1,3-Dichloropropene		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Trchlorofluoromethane		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
Vinyl Acetate		<MDL,X	38	76.1	ug/Kg		<MDL,X,H	41	82.8	ug/Kg		<MDL,X,H	43	85.6	ug/Kg
Vinyl Chloride		<MDL	7.6	15.2	ug/Kg		<MDL,H	8.3	16.6	ug/Kg		<MDL,H	8.6	17.1	ug/Kg
M.Code=SW-846 8270															
1,2-Diphenylhydrazine		<MDL	81	163	ug/Kg		<MDL	88	177	ug/Kg		<MDL	91	183	ug/Kg
2,4,5-Trichlorophenol		<MDL	170	324	ug/Kg		<MDL	180	353	ug/Kg		<MDL	190	365	ug/Kg
2,4,6-Trichlorophenol		<MDL	170	324	ug/Kg		<MDL	180	353	ug/Kg		<MDL	190	365	ug/Kg
2,4-Dichlorophenol		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
2,4-Dimethylphenol		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
2,4-Dinitrophenol		<MDL,G	81	163	ug/Kg		<MDL,G	88	177	ug/Kg		<MDL,G	91	183	ug/Kg
2,4-Dinitrotoluene		<MDL	17	32.4	ug/Kg		<MDL	18	35.3	ug/Kg		<MDL	19	36.5	ug/Kg
2,6-Dinitrotoluene		<MDL	17	32.4	ug/Kg		<MDL	18	35.3	ug/Kg		<MDL	19	36.5	ug/Kg
2-Chloronaphthalene		<MDL,G	24	40.6	ug/Kg		<MDL,G	26	44.2	ug/Kg		<MDL,G	27	45.7	ug/Kg
2-Chlorophenol		<MDL,G	81	163	ug/Kg		<MDL,G	88	177	ug/Kg		<MDL,G	91	183	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG1	Locator:	P53VG2	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-1	Lab ID:	L9209-2	Lab ID:	L9209-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	65.7	% Solids:	60.4	% Solids:	58.4

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Methylnaphthalene		<MDL,G	65	122	ug/Kg		<MDL,G	71	132	ug/Kg		<MDL,G	74	137	ug/Kg
2-Methylphenol		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
2-Nitroaniline		<MDL	170	244	ug/Kg		<MDL	180	265	ug/Kg		<MDL	190	274	ug/Kg
2-Nitrophenol		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
3,3'-Dichlorobenzidine		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
3-Nitroaniline		<MDL,G	170	244	ug/Kg		<MDL,G	180	265	ug/Kg		<MDL,G	190	274	ug/Kg
4,6-Dinitro-O-Cresol		<MDL	81	163	ug/Kg		<MDL	88	177	ug/Kg		<MDL	91	183	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	17	24.4	ug/Kg		<MDL	18	26.5	ug/Kg		<MDL	19	27.4	ug/Kg
4-Chloro-3-Methylphenol		<MDL	81	163	ug/Kg		<MDL	88	177	ug/Kg		<MDL	91	183	ug/Kg
4-Chloroaniline		<MDL,G	81	163	ug/Kg		<MDL,G	88	177	ug/Kg		<MDL,G	91	183	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	24	40.6	ug/Kg		<MDL	26	44.2	ug/Kg		<MDL	27	45.7	ug/Kg
4-Methylphenol	440	G	41	81.1	ug/Kg	556	G	45	88.2	ug/Kg	574	G	46	91.3	ug/Kg
4-Nitroaniline		<MDL	170	244	ug/Kg		<MDL	180	265	ug/Kg		<MDL	190	274	ug/Kg
4-Nitrophenol		<MDL	81	163	ug/Kg		<MDL	88	177	ug/Kg		<MDL	91	183	ug/Kg
Acenaphthene	37.3		17	32.4	ug/Kg	36.8		18	35.3	ug/Kg	41.6		19	36.5	ug/Kg
Acenaphthylene		<MDL	24	40.6	ug/Kg	28	<RDL	26	44.2	ug/Kg		<MDL	27	45.7	ug/Kg
Aniline		<MDL,G	81	163	ug/Kg		<MDL,G	88	177	ug/Kg		<MDL,G	91	183	ug/Kg
Anthracene	163	G	24	40.6	ug/Kg	224	G	26	44.2	ug/Kg	247	G	27	45.7	ug/Kg
Benzidine		<MDL,X	970	1950	ug/Kg		<MDL,X	1100	2120	ug/Kg		<MDL,X	1100	2190	ug/Kg
Benzo(a)anthracene	346	G	24	40.6	ug/Kg	510	G	26	44.2	ug/Kg	481	G	27	45.7	ug/Kg
Benzo(a)pyrene	370	G	41	81.1	ug/Kg	594	G	45	88.2	ug/Kg	587	G	46	91.3	ug/Kg
Benzo(b)fluoranthene	473		65	122	ug/Kg	853		71	132	ug/Kg	800		74	137	ug/Kg
Benzo(g,h,i)perylene	196	G	41	81.1	ug/Kg	263	G	45	88.2	ug/Kg	289	G	46	91.3	ug/Kg
Benzo(k)fluoranthene	221	G	65	122	ug/Kg	306	G	71	132	ug/Kg	329	G	74	137	ug/Kg
Benzoic Acid		<MDL,L	170	244	ug/Kg		<MDL,L	180	265	ug/Kg		<MDL,L	190	274	ug/Kg
Benzyl Alcohol		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Benzyl Butyl Phthalate	41.4		24	40.6	ug/Kg	35	<RDL	26	44.2	ug/Kg	41	<RDL	27	45.7	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL,G	24	40.6	ug/Kg		<MDL,G	26	44.2	ug/Kg		<MDL,G	27	45.7	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL,G	81	163	ug/Kg		<MDL,G	88	177	ug/Kg		<MDL,G	91	183	ug/Kg
Bis(2-Ethylhexyl)Phthalate	143		24	40.6	ug/Kg	263		26	44.2	ug/Kg	289		27	45.7	ug/Kg
Carbazole		<MDL	41	81.1	ug/Kg	51	<RDL	45	88.2	ug/Kg	57	<RDL	46	91.3	ug/Kg
Chrysene	522		24	40.6	ug/Kg	863		26	44.2	ug/Kg	801		27	45.7	ug/Kg
Coprostanol	400		170	244	ug/Kg	384		180	265	ug/Kg	190	<RDL	190	274	ug/Kg
Di-N-Butyl Phthalate		<MDL	41	81.1	ug/Kg		<MDL	45	88.2	ug/Kg		<MDL	46	91.3	ug/Kg
Di-N-Octyl Phthalate		<MDL	24	40.6	ug/Kg		<MDL	26	44.2	ug/Kg		<MDL	27	45.7	ug/Kg
Dibenzo(a,h)anthracene		<MDL	65	122	ug/Kg	79	<RDL	71	132	ug/Kg	77	<RDL	74	137	ug/Kg
Dibenzofuran		<MDL	41	81.1	ug/Kg		<MDL	45	88.2	ug/Kg		<MDL	46	91.3	ug/Kg
Diethyl Phthalate		<MDL	41	81.1	ug/Kg		<MDL	45	88.2	ug/Kg		<MDL	46	91.3	ug/Kg
Dimethyl Phthalate		<MDL	17	24.4	ug/Kg		<MDL	18	26.5	ug/Kg		<MDL	19	27.4	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG1	Locator:	P53VG2	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-1	Lab ID:	L9209-2	Lab ID:	L9209-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	65.7	% Solids:	60.4	% Solids:	58.4

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Fluoranthene	559	G	24	48.7	ug/Kg	632	G	26	53	ug/Kg	616	G	27	54.8	ug/Kg
Fluorene	63.6	G	24	40.6	ug/Kg	68.5	G	26	44.2	ug/Kg	67	G	27	45.7	ug/Kg
Hexachlorobutadiene		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Hexachlorocyclopentadiene		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Hexachloroethane		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Indeno(1,2,3-Cd)Pyrene	199	G	41	81.1	ug/Kg	285	G	45	88.2	ug/Kg	296	G	46	91.3	ug/Kg
Isophorone		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
N-Nitrosodimethylamine		<MDL,G	170	244	ug/Kg		<MDL,G	180	265	ug/Kg		<MDL,G	190	274	ug/Kg
N-Nitrosodiphenylamine		<MDL	41	81.1	ug/Kg		<MDL	45	88.2	ug/Kg		<MDL	46	91.3	ug/Kg
Naphthalene		<MDL,G	65	122	ug/Kg		<MDL,G	71	132	ug/Kg		<MDL,G	74	137	ug/Kg
Nitrobenzene		<MDL,G	41	81.1	ug/Kg		<MDL,G	45	88.2	ug/Kg		<MDL,G	46	91.3	ug/Kg
Pentachlorophenol		<MDL,E,G	41	81.1	ug/Kg		<MDL,E,G	45	88.2	ug/Kg		<MDL,E,G	46	91.3	ug/Kg
Phenanthrene	332	G	24	40.6	ug/Kg	359	G	26	44.2	ug/Kg	375	G	27	45.7	ug/Kg
Phenol	306	G	170	244	ug/Kg	402	G	180	265	ug/Kg	481	G	190	274	ug/Kg
Pyrene	553	G	24	40.6	ug/Kg	642	G	26	44.2	ug/Kg	726	G	27	45.7	ug/Kg
M.Code=SW-846 8270 (SIN)															
1,2,4-Trichlorobenzene		<MDL,G	1.1	2.02	ug/Kg		<MDL,G	1.1	2.2	ug/Kg		<MDL,G	1.2	2.28	ug/Kg
1,2-Dichlorobenzene		<MDL,G	1.1	2.02	ug/Kg		<MDL,G	1.1	2.2	ug/Kg		<MDL,G	1.2	2.28	ug/Kg
1,3-Dichlorobenzene		<MDL,G	1.1	2.02	ug/Kg		<MDL,G	1.1	2.2	ug/Kg		<MDL,G	1.2	2.28	ug/Kg
1,4-Dichlorobenzene		<MDL,G	1.1	2.02	ug/Kg		<MDL,G	1.1	2.2	ug/Kg		<MDL,G	1.2	2.28	ug/Kg
Hexachlorobenzene		<MDL,G	1.1	2.02	ug/Kg		<MDL,G	1.1	2.2	ug/Kg		<MDL,G	1.2	2.28	ug/Kg
* indicates wet weight used for this parameter															
METALS															
M.Code=METRO 16-01-001															
Mercury, Total, CVAA	0.14	<RDL	0.026	0.256	mg/Kg	0.16	<RDL	0.026	0.268	mg/Kg	0.21	<RDL	0.029	0.293	mg/Kg
M.Code=METRO 16-02-001															
Aluminum, Total, ICP	13400	L	7.5	37.1	mg/Kg	15100	L	8.3	41.7	mg/Kg	16100	L	8.4	42	mg/Kg
Antimony, Total, ICP		<MDL,G	2.3	11.2	mg/Kg		<MDL,G	2.5	12.5	mg/Kg		<MDL,G	2.6	12.6	mg/Kg
Arsenic, Total, ICP	5.8	<RDL	3.7	18.6	mg/Kg	7.6	<RDL	4.1	20.9	mg/Kg	5.5	<RDL	4.1	20.9	mg/Kg
Barium, Total, ICP															
Beryllium, Total, ICP	0.18	<RDL	0.075	0.371	mg/Kg	0.22	<RDL	0.083	0.417	mg/Kg	0.21	<RDL	0.084	0.42	mg/Kg
Cadmium, Total, ICP		<MDL	0.23	1.12	mg/Kg	0.33	<RDL	0.25	1.25	mg/Kg		<MDL	0.26	1.26	mg/Kg
Calcium, Total, ICP	4440		3.7	18.6	mg/Kg	4820		4.1	20.9	mg/Kg	5330		4.1	20.9	mg/Kg
Chromium, Total, ICP	17.8		0.37	1.86	mg/Kg	21.2		0.41	2.09	mg/Kg	22.3		0.41	2.09	mg/Kg
Copper, Total, ICP	24.7		0.3	1.49	mg/Kg	33.4		0.33	1.67	mg/Kg	36.3		0.34	1.68	mg/Kg
Iron, Total, ICP	21600	G	3.7	18.6	mg/Kg	23700	G	4.1	20.9	mg/Kg	23600	G	4.1	20.9	mg/Kg
Lead, Total, ICP	17.4		2.3	11.2	mg/Kg	24.3		2.5	12.5	mg/Kg	26.4		2.6	12.6	mg/Kg
Magnesium, Total, ICP	5510		2.3	11.2	mg/Kg	5810		2.5	12.5	mg/Kg	6180		2.6	12.6	mg/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG1	Locator:	P53VG2	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab D:	L9209-1	Lab ID:	L9209-2	Lab ID:	L9209-3
	Matrx:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	65.7	% Solids:	60.4	% Solids:	58.4

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Mdybdenum, Total, ICP	1.8	<RDL	1.5	7.43	mg/Kg		<MDL	1.7	8.34	mg/Kg		<MDL	1.7	8.39	mg/Kg
Nickel, Total, ICP	17.2		1.5	7.43	mg/Kg	17.1		1.7	8.34	mg/Kg	18.5		1.7	8.39	mg/Kg
Potassium, Total, ICP	1630		150	743	mg/Kg	1940		170	834	mg/Kg	2000		170	839	mg/Kg
Seenium, Total, ICP		<MDL	3.7	18.6	mg/Kg		<MDL	4.1	20.9	mg/Kg		<MDL	4.1	20.9	mg/Kg
Silver, Total, ICP		<MDL	0.3	1.49	mg/Kg		<MDL	0.33	1.67	mg/Kg		<MDL	0.34	1.68	mg/Kg
Sodium, Total, ICP															
Thallium, Total, ICP		<MDL	15	74.3	mg/Kg		<MDL	17	83.4	mg/Kg		<MDL	17	83.9	mg/Kg
Zirc, Total, ICP	63.9		0.37	1.86	mg/Kg	73.3		0.41	2.09	mg/Kg	78.4		0.41	2.09	mg/Kg
* indicates wet weight used for this parameter															
CONVENTIONALS															
M.Code=PSEP p9															
p+0.00 *	2.3		0.1		%	3.9		0.1		%	0.9		0.1		%
p+1.00 *	18.7		0.1		%	20.1		0.1		%	10.8		0.1		%
p+10.0 *	0.7		0.1		%	0.8		0.1		%	0.8		0.1		%
p+10.0(more than) *	3.3		0.1		%	3.6		0.1		%	4.3		0.1		%
p+2.00 *	49.9		0.1		%	33.9		0.1		%	45.1		0.1		%
p+3.00 *	11.9		0.1		%	14.6		0.1		%	12.1		0.1		%
p+4.00 *	2		0.1		%	3.3		0.1		%	3.1		0.1		%
p+5.00 *		<MDL	0.1		%	3.9		0.1		%	7.6		0.1		%
p+5.00 *	2		0.1		%	2.8		0.1		%	2.8		0.1		%
p+7.00 *	3.9		0.1		%	5.2		0.1		%	3.6		0.1		%
p+8.00 *	2.4		0.1		%	4.7		0.1		%	5.3		0.1		%
p+9.00 *	1.4		0.1		%	1.8		0.1		%	1.9		0.1		%
p-1.00 *	1		0.1		%	0.9		0.1		%	0.5		0.1		%
p-2.00 *	0.1		0.1		%		<MDL	0.1		%	0.2		0.1		%
p-2.00(less than) *	0.6		0.1		%	0.6		0.1		%	1.1		0.1		%
M.Code=SM5310-B															
Total Organic Carbon	7520		7.6	15.2	mg/Kg	22000		8.3	16.6	mg/Kg	9850		8.6	17.1	mg/Kg
* indicates wet weight used for this parameter															

King County Environmental Lab Analytical Report

PROJECT: 423056															
	Locator:	P53VG4				Locator:	P53VG5				Locator:	P53VG5			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-4				Lab ID:	L9209-5				Lab ID:	L9209-11			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	72.4				% Solids:	52.7				% Solids:	61.7			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
ORGANICS															
M.Code=SW-846 8080															
4,4'-DDD		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg	4.72		2.1	4.33	ug/Kg
4,4'-DDE		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
4,4'-DDT		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Aldrin		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Alpha-BHC		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Aroclor 1016		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
Aroclor 1221		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
Aroclor 1232		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
Aroclor 1242		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
Aroclor 1248		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
Aroclor 1254		<MDL	18	36.9	ug/Kg	71.9		25	50.7	ug/Kg	36	<RDL	21	43.3	ug/Kg
Aroclor 1260		<MDL	18	36.9	ug/Kg	79.5		25	50.7	ug/Kg	36	<RDL	21	43.3	ug/Kg
Beta-BHC		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Chlordane		<MDL	9.3	18.4	ug/Kg		<MDL	13	25.2	ug/Kg		<MDL	11	21.6	ug/Kg
Delta-BHC		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Dieldrin		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Endosulfan I		<MDL	1.8	3.69	ug/Kg	12		2.5	5.07	ug/Kg	7.07		2.1	4.33	ug/Kg
Endosulfan II		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Endosulfan Sulfate		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Endrin		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Endrin Aldehyde		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Gamma-BHC (Lindane)		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Heptachlor		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Heptachlor Epoxide		<MDL	1.8	3.69	ug/Kg		<MDL	2.5	5.07	ug/Kg		<MDL	2.1	4.33	ug/Kg
Methoxychlor		<MDL	9.3	18.4	ug/Kg		<MDL	13	25.2	ug/Kg		<MDL	11	21.6	ug/Kg
Toxaphene		<MDL	18	36.9	ug/Kg		<MDL	25	50.7	ug/Kg		<MDL	21	43.3	ug/Kg
M.Code=SW-846 8260															
1,1,1-Trichloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,1,2-Trichloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,1,2-Trichloroethylene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,1-Dichloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,1-Dichloroethylene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,2-Dichloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
1,2-Dichloropropane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
2-Butanone (MEK)		<MDL,H	35	69.1	ug/Kg		<MDL,H	47	94.9	ug/Kg		<MDL,H	41	81	ug/Kg
2-Chloroethylvinyl ether		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056														
	Locator:	P53VG4				Locator:	P53VG5				Locator:	P53VG5		
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96		
	Lab ID:	L9209-4				Lab ID:	L9209-5				Lab ID:	L9209-11		
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED		
	% Solids:	72.4				% Solids:	52.7				% Solids:	61.7		
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Hexanone		<MDL,H	35	69.1	ug/Kg		<MDL,H	47	94.9	ug/Kg		<MDL,H	41	81	ug/Kg
4-Methyl-2-Pentanone (MBK)		<MDL,H	35	69.1	ug/Kg		<MDL,H	47	94.9	ug/Kg		<MDL,H	41	81	ug/Kg
Acetone	69	<RDL,B,H	18	69.1	ug/Kg	168	B,H	25	94.9	ug/Kg	119	B,H	21	81	ug/Kg
Acrolein		<MDL,X,H	35	69.1	ug/Kg		<MDL,X,H	47	94.9	ug/Kg		<MDL,X,H	41	81	ug/Kg
Acrylonitrile		<MDL,H	35	69.1	ug/Kg		<MDL,H	47	94.9	ug/Kg		<MDL,H	41	81	ug/Kg
Benzene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Bromodichloromethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Bromoform		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Bromomethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Carbon Disulfide		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Carbon Tetrachloride		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chlorobenzene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chlorodibromomethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chloroethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chloroform		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chloromethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Chloromethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Cis-1,3-Dichloropropene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Ethylbenzene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Methylene Chloride		<MDL,H	6.9	69.1	ug/Kg		<MDL,H	9.5	94.9	ug/Kg		<MDL,H	8.1	81	ug/Kg
Styrene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Tetrachloroethylene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Toluene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Total Xylenes		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Trans-1,2-Dichloroethylene		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Trans-1,3-Dichloropropere		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Trichlorofluoromethane		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
Vinyl Acetate		<MDL,X,H	35	69.1	ug/Kg		<MDL,X,H	47	94.9	ug/Kg		<MDL,X,H	41	81	ug/Kg
Vinyl Chloride		<MDL,H	6.9	13.8	ug/Kg		<MDL,H	9.5	19	ug/Kg		<MDL,H	8.1	16.2	ug/Kg
M.Code=SW-846 8270															
1,2-Diphenylhydrazine		<MDL	73	148	ug/Kg		<MDL	100	203	ug/Kg		<MDL	86	173	ug/Kg
2,4,5-Trichlorophenol		<MDL	150	294	ug/Kg		<MDL	210	404	ug/Kg		<MDL	180	345	ug/Kg
2,4,6-Trichlorophenol		<MDL	150	294	ug/Kg		<MDL	210	404	ug/Kg		<MDL	180	345	ug/Kg
2,4-Dichlorophenol		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
2,4-Dimethylphenol		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
2,4-Dinitrophenol		<MDL,G	73	148	ug/Kg		<MDL,G	100	203	ug/Kg		<MDL,G	86	173	ug/Kg
2,4-Dinitrotoluene		<MDL	15	29.4	ug/Kg		<MDL	21	40.4	ug/Kg		<MDL	18	34.5	ug/Kg
2,6-Dinitrotoluene		<MDL	15	29.4	ug/Kg		<MDL	21	40.4	ug/Kg		<MDL	18	34.5	ug/Kg
2-Chloronaphthalene		<MDL,G	22	36.9	ug/Kg		<MDL,G	30	50.7	ug/Kg		<MDL,G	26	43.3	ug/Kg
2-Chlorophenol		<MDL,G	73	148	ug/Kg		<MDL,G	100	203	ug/Kg		<MDL,G	86	173	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056															
	Locator:	P53VG4				Locator:	P53VG5				Locator:	P53VG5			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-4				Lab ID:	L9209-5				Lab ID:	L9209-11			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	72.4				% Solids:	52.7				% Solids:	61.7			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Methylnaphthalene		<MDL,G	59	110	ug/Kg	110	<RDL,G	82	152	ug/Kg		<MDL,G	70	130	ug/Kg
2-Methylphenol		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
2-Nitroaniline		<MDL	150	221	ug/Kg		<MDL	210	304	ug/Kg		<MDL	180	259	ug/Kg
2-Nitrophenol		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
3,3'-Dichlorobenzidine		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
3-Nitroaniline		<MDL,G	150	221	ug/Kg		<MDL,G	210	304	ug/Kg		<MDL,G	180	259	ug/Kg
4,6-Dinitro-O-Cresol		<MDL	73	148	ug/Kg		<MDL	100	203	ug/Kg		<MDL	86	173	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	15	22.1	ug/Kg		<MDL	21	30.4	ug/Kg		<MDL	18	25.9	ug/Kg
4-Chloro-3-Methylphenol		<MDL	73	148	ug/Kg		<MDL	100	203	ug/Kg		<MDL	86	173	ug/Kg
4-Chloroaniline		<MDL,G	73	148	ug/Kg		<MDL,G	100	203	ug/Kg		<MDL,G	86	173	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	22	36.9	ug/Kg		<MDL	30	50.7	ug/Kg		<MDL	26	43.3	ug/Kg
4-Methylphenol	291	G	37	73.6	ug/Kg	2160	G	51	101	ug/Kg	985	G	44	86.4	ug/Kg
4-Nitroaniline		<MDL	150	221	ug/Kg		<MDL	210	304	ug/Kg		<MDL	180	259	ug/Kg
4-Nitrophenol		<MDL	73	148	ug/Kg		<MDL	100	203	ug/Kg		<MDL	86	173	ug/Kg
Acenaphthene	34.5		15	29.4	ug/Kg	273		21	40.4	ug/Kg	134		18	34.5	ug/Kg
Acenaphthylene		<MDL	22	36.9	ug/Kg	111		30	50.7	ug/Kg	61.4		26	43.3	ug/Kg
Aniline		<MDL,G	73	148	ug/Kg		<MDL,G	100	203	ug/Kg		<MDL,G	86	173	ug/Kg
Anthracene	209	G	22	36.9	ug/Kg	930	G	30	50.7	ug/Kg	525	●	26	43.3	ug/Kg
Benzidine		<MDL,X	880	1770	ug/Kg		<MDL,X	1200	2430	ug/Kg		<MDL,X	1000	2070	ug/Kg
Benzo(a)anthracene	309	G	22	36.9	ug/Kg	2200	G	30	50.7	ug/Kg	1160	G	26	43.3	ug/Kg
Benzo(a)pyrene	359	G	37	73.6	ug/Kg	2350	G	51	101	ug/Kg	1220	G	44	86.4	ug/Kg
Benzo(b)fluoranthene	508		59	110	ug/Kg	3430		82	152	ug/Kg	1730		70	130	ug/Kg
Benzo(g,h,i)perylene	159	G	37	73.6	ug/Kg	691	G	51	101	ug/Kg	303	G	44	86.4	ug/Kg
Benzo(k)fluoranthene	195	G	59	110	ug/Kg	1220	G	82	152	ug/Kg	718	G	70	130	ug/Kg
Benzoic Acid		<MDL,L	150	221	ug/Kg	270	<RDL,L	210	304	ug/Kg		<MDL,L	180	259	ug/Kg
Benzyl Alcohol		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Benzyl Butyl Phthalate	26	<RDL	22	36.9	ug/Kg	38	<RDL	30	50.7	ug/Kg		<MDL	26	43.3	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL,G	22	36.9	ug/Kg		<MDL,G	30	50.7	ug/Kg		<MDL,G	26	43.3	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL,G	73	148	ug/Kg		<MDL,G	100	203	ug/Kg		<MDL,G	86	173	ug/Kg
Bis(2-Ethylhexyl)Phthalate	372		22	36.9	ug/Kg	349		30	50.7	ug/Kg	259		26	43.3	ug/Kg
Carbazole	57	<RDL	37	73.6	ug/Kg	207		51	101	ug/Kg	125		44	86.4	ug/Kg
Chrysene	490		22	36.9	ug/Kg	3230		30	50.7	ug/Kg	1520		26	43.3	ug/Kg
Coprostanol		<MDL	150	221	ug/Kg	822		210	304	ug/Kg	517		180	259	ug/Kg
Di-N-Butyl Phthalate		<MDL	37	73.6	ug/Kg		<MDL	51	101	ug/Kg		<MDL	44	86.4	ug/Kg
Di-N-Octyl Phthalate		<MDL	22	36.9	ug/Kg	32	<RDL	30	50.7	ug/Kg		<MDL	26	43.3	ug/Kg
Dibenzo(a,h)anthracene		<MDL	59	110	ug/Kg	230		82	152	ug/Kg	120	<RDL	70	130	ug/Kg
Dibenzofuran		<MDL	37	73.6	ug/Kg	262		51	101	ug/Kg	129		44	86.4	ug/Kg
Diethyl Phthalate		<MDL	37	73.6	ug/Kg		<MDL	51	101	ug/Kg		<MDL	44	86.4	ug/Kg
Dimethyl Phthalate		<MDL	15	22.1	ug/Kg		<MDL	21	30.4	ug/Kg		<MDL	18	25.9	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG4	Locator:	P53VG5	Locator:	P53VG5
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-4	Lab ID:	L9209-5	Lab ID:	L9209-11
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	72.4	% Solids:	52.7	% Solids:	61.7

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Fluoranthene	446	G	22	44.2	ug/Kg	2790	G	30	60.7	ug/Kg	1750	G	26	51.9	ug/Kg
Fluorene	66.7	G	22	36.9	ug/Kg	385	G	30	50.7	ug/Kg	193	G	26	43.3	ug/Kg
Hexachlorobutadiene		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Hexachlorocyclopentadiene		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Hexachloroethane		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Indeno(1,2,3-Cd)Pyrene	171	G	37	73.6	ug/Kg	829	G	51	101	ug/Kg	452	G	44	86.4	ug/Kg
Isophorone		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
N-Nitrosodimethylamine		<MDL,G	150	221	ug/Kg		<MDL,G	210	304	ug/Kg		<MDL,G	180	259	ug/Kg
N-Nitrosodiphenylamine		<MDL	37	73.6	ug/Kg		<MDL	51	101	ug/Kg		<MDL	44	86.4	ug/Kg
Naphthalene		<MDL,G	59	110	ug/Kg	393	G	82	152	ug/Kg	214	G	70	130	ug/Kg
Nitrobenzene		<MDL,G	37	73.6	ug/Kg		<MDL,G	51	101	ug/Kg		<MDL,G	44	86.4	ug/Kg
Pentachlorophenol		<MDL,E,G	37	73.6	ug/Kg		<MDL,E,G	51	101	ug/Kg		<MDL,E,G	44	86.4	ug/Kg
Phenanthrene	267	G	22	36.9	ug/Kg	1390	G	30	50.7	ug/Kg	715	G	26	43.3	ug/Kg
Phenol	405	G	150	221	ug/Kg	1630	G	210	304	ug/Kg	692	G	180	259	ug/Kg
Pyrene	442	G	22	36.9	ug/Kg	4420	G	30	50.7	ug/Kg	2790	G	26	43.3	ug/Kg
M.Code=SW-846 8270 (SIM)															
1,2,4-Trichlorobenzene		<MDL,G	0.95	1.84	ug/Kg		<MDL,G	1.3	2.52	ug/Kg		<MDL,G	1.1	2.16	ug/Kg
1,2-Dichlorobenzene		<MDL,G	0.95	1.84	ug/Kg		<MDL,G	1.3	2.52	ug/Kg		<MDL,G	1.1	2.16	ug/Kg
1,3-Dichlorobenzene		<MDL,G	0.95	1.84	ug/Kg		<MDL,G	1.3	2.52	ug/Kg		<MDL,G	1.1	2.16	ug/Kg
1,4-Dichlorobenzene		<MDL,G	0.95	1.84	ug/Kg	6.68	G	1.3	2.52	ug/Kg		<MDL,G	1.1	2.16	ug/Kg
Hexachlorobenzene		<MDL,G	0.95	1.84	ug/Kg		<MDL,G	1.3	2.52	ug/Kg		<MDL,G	1.1	2.16	ug/Kg
* indicates wet weight used for th															
METALS															
M.Code=METRO 16-01-001															
Mercury, Total, CVAA	0.087	<RDL	0.025	0.244	mg/Kg	0.467		0.032	0.328	mg/Kg	0.28	<RDL	0.031	0.306	mg/Kg
M.Code=METRO 16-02-001															
Aluminum, Total, ICP	12600	L	6.9	34.3	mg/Kg	15600	L	9.9	49.3	mg/Kg	14200	L	7.8	39.2	mg/Kg
Antimony, Total, ICP		<MDL,G	2.1	10.3	mg/Kg		<MDL,G	3	14.8	mg/Kg		<MDL,G	2.4	11.8	mg/Kg
Arsenic, Total, ICP	5.5	<RDL	3.5	17.1	mg/Kg	12	<RDL	4.9	24.7	mg/Kg	11	<RDL	3.9	19.6	mg/Kg
Barium, Total, ICP															
Beryllium, Total, ICP	0.15	<RDL	0.069	0.343	mg/Kg	0.23	<RDL	0.099	0.493	mg/Kg	0.23	<RDL	0.078	0.392	mg/Kg
Cadmium, Total, ICP		<MDL	0.21	1.03	mg/Kg	0.59	<RDL	0.3	1.48	mg/Kg	0.44	<RDL	0.24	1.18	mg/Kg
Calcium, Total, ICP	4610		3.5	17.1	mg/Kg	5370		4.9	24.7	mg/Kg	4600		3.9	19.6	mg/Kg
Chromium, Total, ICP	17.7		0.35	1.71	mg/Kg	30		0.49	2.47	mg/Kg	22.9		0.39	1.96	mg/Kg
Copper, Total, ICP	24.9		0.28	1.37	mg/Kg	62.8		0.4	1.97	mg/Kg	45.7		0.31	1.57	mg/Kg
Iron, Total, ICP	22100	G	3.5	17.1	mg/Kg	26400	G	4.9	24.7	mg/Kg	25000	G	3.9	19.6	mg/Kg
Lead, Total, ICP	16		2.1	10.3	mg/Kg	98.9		3	14.8	mg/Kg	45.5		2.4	11.8	mg/Kg
Magnesium, Total, ICP	4930		2.1	10.3	mg/Kg	6600		3	14.8	mg/Kg	5980		2.4	11.8	mg/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG4				Locator:	P53VG5				Locator:	P53VG5			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-4				Lab ID:	L9209-5				Lab ID:	L9209-11			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	72.4				% Solids:	52.7				% Solids:	61.7			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Molybdenum, Total, ICP		<MDL	1.4	6.84	mg/Kg		<MDL	1.9	9.87	mg/Kg		<MDL	1.6	7.84	mg/Kg
Nickel, Total, ICP	15.5		1.4	6.84	mg/Kg	25		1.9	9.87	mg/Kg	20.4		1.6	7.84	mg/Kg
Potassium, Total, ICP	1480		140	684	mg/Kg	2260		190	987	mg/Kg	1900		160	784	mg/Kg
Selenium, Total, ICP		<MDL	3.5	17.1	mg/Kg		<MDL	4.9	24.7	mg/Kg		<MDL	3.9	19.6	mg/Kg
Silver, Total, ICP		<MDL	0.28	1.37	mg/Kg	1.2	<RDL	0.4	1.97	mg/Kg	0.57	<RDL	0.31	1.57	mg/Kg
Sodium, Total, ICP															
Thallium, Total, ICP		<MDL	14	68.4	mg/Kg		<MDL	19	98.7	mg/Kg		<MDL	16	78.4	mg/Kg
Zinc, Total, ICP	63.8		0.35	1.71	mg/Kg	119		0.49	2.47	mg/Kg	94.7		0.39	1.96	mg/Kg
* Indicates wet weight used for th															
CONVENTIONALS															
M.Code=PSEP p9															
p+0.00 *	4.2		0.1		%	1.1		0.1		%	2.9		0.1		%
p+1.00 *	28.7		0.1		%	9.3		0.1		%	22.5		0.1		%
p+10.0 *	0.7		0.1		%	2.3		0.1		%	1.6		0.1		%
p+10.0(more than) *	2.4		0.1		%	9.2		0.1		%	5.6		0.1		%
p+2.00 *	42.6		0.1		%	31.1		0.1		%	41.4		0.1		%
p+3.00 *	5.8		0.1		%	11		0.1		%	7.7		0.1		%
p+4.00 *	1.6		0.1		%	4.6		0.1		%	2.5		0.1		%
p+5.00 *	3.2		0.1		%	4.8		0.1		%	1.9		0.1		%
p+6.00 *	1.9		0.1		%	5.2		0.1		%	2.8		0.1		%
p+7.00 *	1.7		0.1		%	7.7		0.1		%	2		0.1		%
p+8.00 *	3.3		0.1		%	8.2		0.1		%	4.5		0.1		%
p+9.00 *	1.5		0.1		%	4.5		0.1		%	3		0.1		%
p-1.00 *	1.5		0.1		%	0.4		0.1		%	0.8		0.1		%
p-2.00 *	0.1		0.1		%	0.4		0.1		%	0.5		0.1		%
p-2.00(less than) *	0.7		0.1		%	0.2		0.1		%	0.5		0.1		%
M.Code=SM5310-B															
Total Organic Carbon	7750		6.9	13.8	mg/Kg	26000		9.5	19	mg/Kg	13800		8.1	16.2	mg/Kg
* Indicates wet weight used for this parameter															

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG6	Locator:	P53VG7	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-6	Lab ID:	L9209-7	Lab ID:	L9209-8
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	57.2	% Solids:	75.4	% Solids:	71.8

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
ORGANICS															
M.Code=SW-846 8080															
4,4'-DDD		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
4,4'-DDE		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
4,4'-DDT		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Aldrin		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Alpha-BHC		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Aroclor 1016		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1221		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1232		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1242		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1248		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1254		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Aroclor 1260	35	<RDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
Beta-BHC		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Chlordane		<MDL	12	23.3	ug/Kg		<MDL	8.9	17.6	ug/Kg		<MDL	9.3	18.5	ug/Kg
Delta-BHC		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Dieldrin		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Endosulfan I	5.94		2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Endosulfan II		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Endosulfan Sulfate		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Endrin		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Endrin Aldehyde		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Gamma-BHC (Lindane)		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Heptachlor		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Heptachlor Epoxide		<MDL	2.3	4.67	ug/Kg		<MDL	1.7	3.54	ug/Kg		<MDL	1.8	3.72	ug/Kg
Methoxychlor		<MDL	12	23.3	ug/Kg		<MDL	8.9	17.6	ug/Kg		<MDL	9.3	18.5	ug/Kg
Toxaphene		<MDL	23	46.7	ug/Kg		<MDL	17	35.4	ug/Kg		<MDL	18	37.2	ug/Kg
M.Code=SW-846 8260															
1,1,1-Trichloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,1,2-Trichloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,1,2-Trichloroethylene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,1-Dichloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,1-Dichloroethylene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,2-Dichloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
1,2-Dichloropropane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
2-Butanone (MEK)		<MDL,H	44	87.4	ug/Kg		<MDL,H	33	66.3	ug/Kg		<MDL,H	35	69.6	ug/Kg
2-Chloroethylvinyl ether		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG6	Locator:	P53VG7	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-6	Lab ID:	L9209-7	Lab ID:	L9209-8
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	57.2	% Solids:	75.4	% Solids:	71.8

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Hexanone		<MDL,H	44	87.4	ug/Kg		<MDL,H	33	66.3	ug/Kg		<MDL,H	35	69.6	ug/Kg
4-Methyl-2-Pentanone (MIBK)		<MDL,H	44	87.4	ug/Kg		<MDL,H	33	66.3	ug/Kg		<MDL,H	35	69.6	ug/Kg
Acetone	118	B,H	23	87.4	ug/Kg	46	<RDL,B,H	17	66.3	ug/Kg	67	<RDL,B,H	18	69.6	ug/Kg
Acrolein		<MDL,X,H	44	87.4	ug/Kg		<MDL,X,H	33	66.3	ug/Kg		<MDL,X,H	35	69.6	ug/Kg
Acrylonitrile		<MDL,H	44	87.4	ug/Kg		<MDL,H	33	66.3	ug/Kg		<MDL,H	35	69.6	ug/Kg
Benzene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Bromodichloromethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Bromoform		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Bromomethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Carbon Disulfide		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Carbon Tetrachloride		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chlorobenzene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chlorodibromomethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chloroethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chloroform		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chloromethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Chloromethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Cis-1,3-Dichloropropene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Ethylbenzene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Methylene Chloride		<MDL,H	8.7	87.4	ug/Kg		<MDL,H	6.6	66.3	ug/Kg		<MDL,H	7	69.6	ug/Kg
Styrene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Tetrachloroethylene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Toluene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Total Xylenes		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Trans-1,2-Dichloroethylene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Trans-1,3-Dichloropropene		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Trichlorofluoromethane		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
Vinyl Acetate		<MDL,X,H	44	87.4	ug/Kg		<MDL,X,H	33	66.3	ug/Kg		<MDL,X,H	35	69.6	ug/Kg
Vinyl Chloride		<MDL,H	8.7	17.5	ug/Kg		<MDL,H	6.6	13.3	ug/Kg		<MDL,H	7	13.9	ug/Kg
M.Code=SW-846 8270															
1,2-Diphenylhydrazine		<MDL	93	187	ug/Kg		<MDL	70	142	ug/Kg		<MDL	74	149	ug/Kg
2,4,5-Trichlorophenol		<MDL	190	372	ug/Kg		<MDL	150	282	ug/Kg		<MDL	150	297	ug/Kg
2,4,6-Trichlorophenol		<MDL	190	372	ug/Kg		<MDL	150	282	ug/Kg		<MDL	150	297	ug/Kg
2,4-Dichlorophenol		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
2,4-Dimethylphenol		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
2,4-Dinitrophenol		<MDL,G	93	187	ug/Kg		<MDL,G	70	142	ug/Kg		<MDL,G	74	149	ug/Kg
2,4-Dinitrotoluene		<MDL	19	37.2	ug/Kg		<MDL	15	28.2	ug/Kg		<MDL	15	29.7	ug/Kg
2,6-Dinitrotoluene		<MDL	19	37.2	ug/Kg		<MDL	15	28.2	ug/Kg		<MDL	15	29.7	ug/Kg
2-Chloronaphthalene		<MDL,G	28	46.7	ug/Kg		<MDL,G	21	35.4	ug/Kg		<MDL,G	22	37.2	ug/Kg
2-Chlorophenol		<MDL,G	93	187	ug/Kg		<MDL,G	70	142	ug/Kg		<MDL,G	74	149	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG6				Locator:	P53VG7				Locator:	P53VG3			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-6				Lab ID:	L9209-7				Lab ID:	L9209-8			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SA_TWTRSED			
	% Solids:	57.2				% Solids:	75.4				% Solids:	71.8			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RD_	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Methylnaphthalene		<MDL,G	75	140	ug/Kg		<MDL,G	57	106	ug/Kg		<MDL,G	60	111	ug/Kg
2-Methylphenol		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
2-Nitroaniline		<MDL	190	280	ug/Kg		<MDL	150	212	ug/Kg		<MDL	150	223	ug/Kg
2-Nitrophenol		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
3,3'-Dichlorobenzidine		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
3-Nitroaniline		<MDL,G	190	280	ug/Kg		<MDL,G	150	212	ug/Kg		<MDL,G	150	223	ug/Kg
4,6-Dinitro-O-Cresol		<MDL	93	187	ug/Kg		<MDL	70	142	ug/Kg		<MDL	74	149	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	19	28	ug/Kg		<MDL	15	21.2	ug/Kg		<MDL	15	22.3	ug/Kg
4-Chloro-3-Methylphenol		<MDL	93	187	ug/Kg		<MDL	70	142	ug/Kg		<MDL	74	149	ug/Kg
4-Chloroaniline		<MDL,G	93	187	ug/Kg		<MDL,G	70	142	ug/Kg		<MDL,G	74	149	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	28	46.7	ug/Kg		<MDL	21	35.4	ug/Kg		<MDL	22	37.2	ug/Kg
4-Methylphenol	423	G	47	93.2	ug/Kg	106	G	36	70.7	ug/Kg	461	G	38	74.2	ug/Kg
4-Nitroaniline		<MDL	190	280	ug/Kg		<MDL	150	212	ug/Kg		<MDL	150	223	ug/Kg
4-Nitrophenol		<MDL	93	187	ug/Kg		<MDL	70	142	ug/Kg		<MDL	74	149	ug/Kg
Acenaphthene	60		19	37.2	ug/Kg		<MDL	15	28.2	ug/Kg	15	<RDL	15	29.7	ug/Kg
Acenaphthylene	35	<RDL	28	46.7	ug/Kg		<MDL	21	35.4	ug/Kg		<MDL	22	37.2	ug/Kg
Aniline		<MDL,G	93	187	ug/Kg		<MDL,G	70	142	ug/Kg		<MDL,G	74	149	ug/Kg
Arthracene	351	G	28	46.7	ug/Kg	24	<RDL,G	21	35.4	ug/Kg	73.8	G	22	37.2	ug/Kg
Benzidine		<MDL,X	1100	2240	ug/Kg		<MDL,X	850	1700	ug/Kg		<MDL,X	890	780	ug/Kg
Benzo(a)anthracene	741	G	28	46.7	ug/Kg	73.3	G	21	35.4	ug/Kg	184	G	22	37.2	ug/Kg
Benzo(a)pyrene	767	G	47	93.2	ug/Kg	69	<RDL,G	36	70.7	ug/Kg	209	G	38	74.2	ug/Kg
Benzo(b)fluoranthene	1120		75	140	ug/Kg	110		57	106	ug/Kg	291		60	111	ug/Kg
Benzo(g,h,i)perylene	323	G	47	93.2	ug/Kg	36	<RDL,G	36	70.7	ug/Kg	92.1	G	38	74.2	ug/Kg
Benzo(k)fluoranthene	484	G	75	140	ug/Kg		<MDL,G	57	106	ug/Kg	127	G	60	111	ug/Kg
Benzoic Acid		<MDL,L	190	280	ug/Kg		<MDL,L	150	212	ug/Kg		<MDL,L	150	223	ug/Kg
Benzyl Alcohol		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Benzyl Butyl Phthalate	51.7		28	46.7	ug/Kg	25	<RDL	21	35.4	ug/Kg		<MDL	22	37.2	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL,G	28	46.7	ug/Kg		<MDL,G	21	35.4	ug/Kg		<MDL,G	22	37.2	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL,G	93	187	ug/Kg		<MDL,G	70	142	ug/Kg		<MDL,G	74	149	ug/Kg
Bis(2-Ethylhexyl)Phthalate	281		28	46.7	ug/Kg	56.9		21	35.4	ug/Kg	94.6		22	37.2	ug/Kg
Carbazole	89	<RDL	47	93.2	ug/Kg		<MDL	36	70.7	ug/Kg		<MDL	38	74.2	ug/Kg
Chrysene	1100		28	46.7	ug/Kg	122		21	35.4	ug/Kg	292		22	37.2	ug/Kg
Coprostanol	190	<RDL	190	280	ug/Kg		<MDL	150	212	ug/Kg	170	<RDL	150	223	ug/Kg
Di-N-Butyl Phthalate		<MDL	47	93.2	ug/Kg		<MDL	36	70.7	ug/Kg		<MDL	38	74.2	ug/Kg
Di-N-Octyl Phthalate		<MDL	28	46.7	ug/Kg		<MDL	21	35.4	ug/Kg		<MDL	22	37.2	ug/Kg
Dibenzo(a,h)anthracene	100	<RDL	75	140	ug/Kg		<MDL	57	106	ug/Kg		<MDL	60	111	ug/Kg
Dibenzofuran	54	<RDL	47	93.2	ug/Kg		<MDL	36	70.7	ug/Kg		<MDL	38	74.2	ug/Kg
Diethyl Phthalate		<MDL	47	93.2	ug/Kg		<MDL	36	70.7	ug/Kg		<MDL	38	74.2	ug/Kg
Dimethyl Phthalate		<MDL	19	28	ug/Kg		<MDL	15	21.2	ug/Kg		<MDL	15	22.3	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG6				Locator:	P53VG7				Locator:	P53VG3			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 12, 96			
	Lab ID:	L9209-6				Lab ID:	L9209-7				Lab ID:	L9209-8			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	57.2				% Solids:	75.4				% Solids:	71.3			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
	- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis				
Fluoranthene	965	G	28	55.9	ug/Kg	153	G	21	42.4	ug/Kg	240	G	22	44.6	ug/Kg
Fluorene	113	G	28	46.7	ug/Kg		<MDL,G	21	35.4	ug/Kg		<MDL,G	22	37.2	ug/Kg
Hexachlorobutadiene		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Hexachlorocyclopentadiene		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Hexachloroethane		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Indeno(1,2,3-Cd)Pyrene	360	G	47	93.2	ug/Kg	44	<RDL,G	36	70.7	ug/Kg	112	G	38	74.2	ug/Kg
Isophorone		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
N-Nitrosodimethylamine		<MDL,G	190	280	ug/Kg		<MDL,G	150	212	ug/Kg		<MDL,G	150	223	ug/Kg
N-Nitrosodiphenylamine		<MDL	47	93.2	ug/Kg		<MDL	36	70.7	ug/Kg		<MDL	38	74.2	ug/Kg
Naphthalene		<MDL,G	75	140	ug/Kg		<MDL,G	57	106	ug/Kg		<MDL,G	60	111	ug/Kg
Nitrobenzene		<MDL,G	47	93.2	ug/Kg		<MDL,G	36	70.7	ug/Kg		<MDL,G	38	74.2	ug/Kg
Pentachlorophenol		<MDL,E,G	47	93.2	ug/Kg		<MDL,E,G	36	70.7	ug/Kg		<MDL,E,G	38	74.2	ug/Kg
Phenanthrene	605	G	28	46.7	ug/Kg	84.5	G	21	35.4	ug/Kg	135	G	22	37.2	ug/Kg
Phenol	453	G	190	280	ug/Kg	160	<RDL,G	150	212	ug/Kg	226	G	150	223	ug/Kg
Pyrene	1070	G	28	46.7	ug/Kg	139	G	21	35.4	ug/Kg	263	G	22	37.2	ug/Kg
M.Code=SW-846 8270 (SIM)															
1,2,4-Trichlorobenzene		<MDL,G	1.2	2.33	ug/Kg		<MDL,G	0.92	1.76	ug/Kg		<MDL,G	0.96	1.85	ug/Kg
1,2-Dichlorobenzene		<MDL,G	1.2	2.33	ug/Kg		<MDL,G	0.92	1.76	ug/Kg		<MDL,G	0.96	1.85	ug/Kg
1,3-Dichlorobenzene		<MDL,G	1.2	2.33	ug/Kg		<MDL,G	0.92	1.76	ug/Kg		<MDL,G	0.96	1.85	ug/Kg
1,4-Dichlorobenzene		<MDL,G	1.2	2.33	ug/Kg		<MDL,G	0.92	1.76	ug/Kg		<MDL,G	0.96	1.85	ug/Kg
Hexachlorobenzene		<MDL,G	1.2	2.33	ug/Kg		<MDL,G	0.92	1.76	ug/Kg		<MDL,G	0.96	1.85	ug/Kg
* Indicates wet weight used for th															
METALS															
M.Code=METRO 16-01-001															
Mercury, Total, CVAA	0.19	<RDL	0.033	0.339	mg/Kg	0.041	<RDL	0025	0.245	mg/Kg	0.063	<RDL	0.026	0.26	mg/Kg
M.Code=METRO 16-02-004															
Aluminum, Total, ICP	14800	L	8.4	41.8	mg/Kg	9430	L	6.5	32.6	mg/Kg	11700	L	6.8	34.4	mg/Kg
Antimony, Total, ICP		<MDL,G	2.4	12.5	mg/Kg		<MDL,G	2	9.79	mg/Kg		<MDL,G	2.1	10.3	mg/Kg
Arsenic, Total, ICP	8.9	<RDL	4.2	20.8	mg/Kg	5.3	<RDL	3.3	16.3	mg/Kg	4	<RDL	3.5	17.1	mg/Kg
Barium, Total, ICP															
Beryllium, Total, ICP	0.21	<RDL	0.084	0.418	mg/Kg	0.13	<RDL	0065	0.326	mg/Kg	0.15	<RDL	0.068	0.344	mg/Kg
Cadmium, Total, ICP	0.28	<RDL	0.24	1.25	mg/Kg		<MDL	0.2	0.979	mg/Kg		<MDL	0.21	1.03	mg/Kg
Calcium, Total, ICP	11700		4.2	20.8	mg/Kg	3810		3.3	16.3	mg/Kg	3970		3.5	17.1	mg/Kg
Chromium, Total, ICP	21.3		0.42	2.08	mg/Kg	11.8		0.33	1.63	mg/Kg	19.4		0.35	1.71	mg/Kg
Copper, Total, ICP	40.7		0.33	1.67	mg/Kg	15.8		0.27	1.31	mg/Kg	17.7		0.28	1.37	mg/Kg
Iron, Total, ICP	24300	G	4.2	20.8	mg/Kg	21200	G	3.3	16.3	mg/Kg	19800	G	3.5	17.1	mg/Kg
Lead, Total, ICP	30.9		2.4	12.5	mg/Kg	8.9	<RDL	2	9.79	mg/Kg	20.8		2.1	10.3	mg/Kg
Magnesium, Total, ICP	5930		2.4	12.5	mg/Kg	4070		2	9.79	mg/Kg	4500		2.1	10.3	mg/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056

	Locator:	P53VG6	Locator:	P53VG7	Locator:	P53VG3
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96
	Lab ID:	L9209-6	Lab ID:	L9209-7	Lab ID:	L9209-8
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	57.2	% Solids:	75.4	% Solids:	71.8

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Molybdenum, Total, ICP		<MDL	1.7	8.36	mg/kg		<MDL	1.3	6.53	mg/Kg		<NDL	1.4	6.87	mg/kg
Nickel, Total, ICP	17.2		1.7	8.36	mg/kg	12.8		1.3	6.53	mg/Kg	13.2		1.4	6.87	mg/kg
Potassium, Total, ICP	1980		170	836	mg/kg	1090		130	653	mg/Kg	1360		140	687	mg/kg
Selenium, Total, ICP		<MDL	4.2	20.8	mg/kg		<MDL	3.3	16.3	mg/Kg		<NDL	3.5	17.1	mg/kg
Silver, Total, ICP		<MDL	0.33	1.67	mg/kg		<MDL	0.27	1.31	mg/Kg		<NDL	0.28	137	mg/kg
Sodium, Total, ICP															
Thallium, Total, ICP		<MDL	17	83.6	mg/kg		<MDL	13	65.3	mg/Kg		<NDL	14	63.7	mg/kg
Zinc, Total, ICP	78.3		0.42	2.08	mg/kg	49.3		0.33	1.63	mg/Kg	55.7		0.35	171	mg/kg
* indicates wet weight used for th															
CONVENTIONALS															
M.Code=PSEP p9															
p+0.00 *	1.2		0.1		%	6.9		0.1		%	2		0.1		%
p+1.00 *	11.5		0.1		%	36.7		0.1		%	21.1		0.1		%
p+10.0 *	1.7		0.1		%		<MDL	0.1		%	0.3		0.1		%
p+10.0(more than) *	4.4		0.1		%	1.9		0.1		%	1.8		0.1		%
p+2.00 *	35.8		0.1		%	41.6		0.1		%	53		0.1		%
p+3.00 *	16.1		0.1		%	5.6		0.1		%	10.3		0.1		%
p+4.00 *	4.6		0.1		%	0.9		0.1		%	1.3		0.1		%
p+5.00 *	6.4		0.1		%	1.4		0.1		%	5.6		0.1		%
p+6.00 *	3.1		0.1		%		<MDL	0.1		%		<MDL	0.1		%
p+7.00 *	4.3		0.1		%	0.4		0.1		%		<MDL	0.1		%
p+8.00 *	6.1		0.1		%	1.9		0.1		%	2.2		0.1		%
p+9.00 *	3.5		0.1		%	0.3		0.1		%	0.9		0.1		%
p-1.00 *	0.5		0.1		%	1.9		0.1		%	1		0.1		%
p-2.00 *		<MDL	0.1		%	0.1		0.1		%		<MDL	0.1		%
p-2.00(less than) *	0.8		0.1		%	0.3		0.1		%	0.4		0.1		%
M.Code=SM5310-B															
Total Organic Carbon	26900		8.7	17.5	mg/kg	4630		6.6	13.3	mg/Kg	3360		7	13.9	mg/Kg
* indicates wet weight used for this parameter															

King County Environmental Lab Analytical Report

PROJECT: 423056

Locator:	P53VG4	P53VG5	P53C1
Sampled:	Aug 12, 96	Aug 12, 96	Aug 14, 96
Lab ID:	L9209-9	L9209-10	L9316-1
Matrix:	SALTWTRSED	SALTWTRSED	SALTWTRSED
% Solids:	75.9	61.1	77.7

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry WeightBasis					- Dry Weight Basis		
ORGANICS															
M.Code=SW-846 8080															
4,4-DDD		<MDL	1.7	3.52	ug/Kg	5.43		2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
4,4-DDE		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
4,4-DDT		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Aldrin		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Alpha-BHC		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Arcclor 1016		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1221		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1232		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1242		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1248		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1254		<MDL	17	35.2	ug/Kg	49.1		21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Arcclor 1260		<MDL	17	35.2	ug/Kg	62.2		21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
Beta-BHC		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Chlordane		<MDL	8.8	17.5	ug/Kg		<MDL	11	21.8	ug/Kg		<MDL	8.6	17.1	ug/Kg
Delta-BHC		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Dieldrin		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Endosulfan I		<MDL	1.7	3.52	ug/Kg	6.79		2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Endosulfan II		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Endosulfan Sulfate		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Endrin		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Endrin Aldehyde		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Gamma-BHC (Lindane)		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Heptachlor		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Heptachlor Epoxide		<MDL	1.7	3.52	ug/Kg		<MDL	2.1	4.37	ug/Kg		<MDL	1.7	3.44	ug/Kg
Methoxychlor		<MDL	8.8	17.5	ug/Kg		<MDL	11	21.8	ug/Kg		<MDL	8.6	17.1	ug/Kg
Toxaphene		<MDL	17	35.2	ug/Kg		<MDL	21	43.7	ug/Kg		<MDL	17	34.4	ug/Kg
M.Code=SW-846 8260															
1,1,1-Trichloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,1,2,2-Tetrachloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,1,2-Trichloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,1,2-Trichloroethylene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,1-Dichloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,1-Dichloroethylene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,2-Dichloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
1,2-Dichloropropane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
2-Butanone (MEK)		<MDL,H	33	65.9	ug/Kg		<MDL	41	81.8	ug/Kg					
2-Chloroethylvinyl ether		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG4				Locator:	P53VG5				Locator:	P53C1			
	Sampled:	Aug 12, 96				Sampled:	Aug 12, 96				Sampled:	Aug 14, 96			
	Lab D:	L9209-9				Lab ID:	L9209-10				Lab ID:	L9316-1			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	75.9				% Solids:	61.1				% Solids:	77.7			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Hexanone		<MDL,H	33	65.9	ug/Kg		<MDL	41	81.8	ug/Kg					
4-Methyl-2-Pentanone (MIBK)		<MDL,H	33	65.9	ug/Kg		<MDL	41	81.8	ug/Kg					
Acetone	61	<RDL,B,H	17	65.9	ug/Kg	69	<RDL,B	21	81.8	ug/Kg					
Acrolein		<MDL,X,H	33	65.9	ug/Kg		<MDL,X	41	81.8	ug/Kg					
Acrylonitrile		<MDL,H	33	65.9	ug/Kg		<MDL	41	81.8	ug/Kg					
Benzene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Bromodichloromethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Bromoform		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Bromomethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Carbon Disulfide		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Carbon Tetrachloride		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chlorobenzene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chlorodibromomethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chloroethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chloroform		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chloromethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Chloromethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Cis-1,3-Dichloropropene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Ethylbenzene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Methylene Chloride		<MDL,H	6.6	65.9	ug/Kg		<MDL	8.2	81.8	ug/Kg					
Styrene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Tetrachloroethylene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Toluene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Total Xylenes		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Trans-1,2-Dichloroethylene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Trans-1,3-Dichloropropene		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Trichlorofluoromethane		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
Vinyl Acetate		<MDL,X,H	33	65.9	ug/Kg		<MDL,X	41	81.8	ug/Kg					
Vinyl Chloride		<MDL,H	6.6	13.2	ug/Kg		<MDL	8.2	16.4	ug/Kg					
M.Code=SW-846 8270															
1,2-Diphenylhydrazine		<MDL	70	141	ug/Kg		<MDL	87	175	ug/Kg		<MDL	68	138	ug/Kg
2,4,5-Trichlorophenol		<MDL	140	281	ug/Kg		<MDL	180	349	ug/Kg		<MDL	140	274	ug/Kg
2,4,6-Trichlorophenol		<MDL	140	281	ug/Kg		<MDL	180	349	ug/Kg		<MDL	140	274	ug/Kg
2,4-Dichlorophenol		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
2,4-Dimethylphenol		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
2,4-Dinitrophenol		<MDL	70	141	ug/Kg		<MDL,G	87	175	ug/Kg		<MDL	68	138	ug/Kg
2,4-Dinitrotoluene		<MDL	14	28.1	ug/Kg		<MDL	18	34.9	ug/Kg		<MDL	14	27.4	ug/Kg
2,6-Dinitrotoluene		<MDL	14	28.1	ug/Kg		<MDL	18	34.9	ug/Kg		<MDL	14	27.4	ug/Kg
2-Chloronaphthalene		<MDL	21	35.2	ug/Kg		<MDL,G	26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
2-Chlorophenol		<MDL	70	141	ug/Kg		<MDL,G	87	175	ug/Kg		<MDL	68	138	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG4	P53VG5	P53C
	Sampled:	Aug 12, 96	Aug 12, 96	Aug 14, 96
	Lab ID:	L9209-9	L9209-10	L9316-1
	Matrix:	SALTWTRSED	SALTWTRSED	SALTWTRSED
	% Solids:	75.9	61.1	77.7

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
2-Methylnaphthalene		<MDL	57	105	ug/Kg		<MDL,G	70	131	ug/Kg		<MDL	55	103	ug/Kg
2-Methylphenol		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
2-Nitroaniline		<MDL	140	211	ug/Kg		<MDL	180	262	ug/Kg		<MDL	140	206	ug/Kg
2-Nitrophenol		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
3,3'-Dichlorobenzidine		<MDL,G	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
3-Nitroaniline		<MDL,G	140	211	ug/Kg		<MDL,G	180	262	ug/Kg		<MDL	140	206	ug/Kg
4,6-Dinitro-O-Cresol		<MDL	70	141	ug/Kg		<MDL	87	175	ug/Kg		<MDL	68	138	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	14	21.1	ug/Kg		<MDL	18	26.2	ug/Kg		<MDL	14	20.6	ug/Kg
4-Chloro-3-Methylphenol		<MDL	70	141	ug/Kg		<MDL	87	175	ug/Kg		<MDL	68	138	ug/Kg
4-Chloroaniline		<MDL,G	70	141	ug/Kg		<MDL,G	87	175	ug/Kg		<MDL,G	68	138	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	21	35.2	ug/Kg		<MDL	26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
4-Methylphenol	92.2		36	70.2	ug/Kg	1020	G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
4-Nitroaniline		<MDL	140	211	ug/Kg		<MDL	180	262	ug/Kg		<MDL	140	206	ug/Kg
4-Nitrophenol		<MDL	70	141	ug/Kg		<MDL	87	175	ug/Kg		<MDL	68	138	ug/Kg
Acenaphthene		<MDL	14	28.1	ug/Kg	159		18	34.9	ug/Kg		<MDL	14	27.4	ug/Kg
Acenaphthylene		<MDL	21	35.2	ug/Kg	64.3		26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
Aniline		<MDL,G	70	141	ug/Kg		<MDL,G	87	175	ug/Kg		<MDL,G	68	138	ug/Kg
Anthracene	54.2	G	21	35.2	ug/Kg	563	G	26	43.7	ug/Kg		<MDL,G	21	34.4	ug/Kg
Benzidine		<MDL,X	340	1690	ug/Kg		<MDL,X	1000	2090	ug/Kg		<MD.,X	820	1650	ug/Kg
Benzo(a)anthracene	138	G	21	35.2	ug/Kg	1320	G	26	43.7	ug/Kg		<MD.,G	21	34.4	ug/Kg
Benzo(a)pyrene	161	G	36	70.2	ug/Kg	1540	G	44	87.2	ug/Kg		<MD.,G	35	68.6	ug/Kg
Benzo(b)fluoranthene	216		57	105	ug/Kg	2110		70	131	ug/Kg		<MDL	55	103	ug/Kg
Benzo(g,h,i)perylene	81.9	G	36	70.2	ug/Kg	344	G	44	87.2	ug/Kg		<MD.,G	35	68.6	ug/Kg
Benzo(k)fluoranthene	100	<RDL,G	57	105	ug/Kg	987	G	70	131	ug/Kg		<MD.,G	55	103	ug/Kg
Benzoic Acid		<MDL	140	211	ug/Kg		<MDL,L	180	262	ug/Kg		<MDL	140	206	ug/Kg
Benzyl Alcohol		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Benzyl Butyl Phthalate		<MDL	21	35.2	ug/Kg		<MDL	26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL	36	70.2	ug/Kg		<MD.,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL,G	21	35.2	ug/Kg		<MD.,G	26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL	70	141	ug/Kg		<MD.,G	87	175	ug/Kg		<MDL	68	138	ug/Kg
Bis(2-Ethylhexyl)Phthalate	73.8		21	35.2	ug/Kg	318		26	43.7	ug/Kg	35.1		21	34.4	ug/Kg
Carbazole		<MDL	36	70.2	ug/Kg	120		44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Chrysene	219		21	35.2	ug/Kg	1910		26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
Coprostanol	140	<RDL	140	211	ug/Kg	460		180	262	ug/Kg		<MDL,E	140	206	ug/Kg
Di-N-Butyl Phthalate		<MDL	36	70.2	ug/Kg		<MDL	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Di-N-Octyl Phthalate		<MDL	21	35.2	ug/Kg		<MDL	26	43.7	ug/Kg		<MDL	21	34.4	ug/Kg
Dibenzo(a,h)anthracene		<MDL	57	105	ug/Kg	150		70	131	ug/Kg		<MDL	55	103	ug/Kg
Dibenzofuran		<MDL	36	70.2	ug/Kg	142		44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Diethyl Phthalate		<MDL	36	70.2	ug/Kg		<MDL	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Dimethyl Phthalate		<MDL	14	21.1	ug/Kg		<MDL	18	26.2	ug/Kg		<MDL	14	20.6	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056

	Locator:	P53VG4	Locator:	P53VG5	Locator:	P53C1
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 14, 96
	Lab ID:	L9209-9	Lab ID:	L9209-10	Lab ID:	L9316-1
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	75.9	% Solids:	61.1	% Solids:	77.7

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weigh Basis					- Dry Weight Basis		
Fluoranthene	187	G	21	42.2	ug/Kg	1750	G	26	52.4	ug/Kg	22	<RDL,G	21	41.2	ug/Kg
Fluorene		<MDL,G	21	35.2	ug/Kg	209	G	26	43.7	ug/Kg		<MDL,G	21	34.4	ug/Kg
Hexachlorobutadiene		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
Hexachlorocyclopentadiene		<MDL,G	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
Hexachloroethane		<MDL,G	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
Indeno(1,2,3-Cd)Pyrene	84.3	G	36	70.2	ug/Kg	543	G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
Isophorone		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
N-Nitrosodimethylamine		<MDL,G	140	211	ug/Kg		<MDL,G	180	262	ug/Kg		<MDL,G	140	206	ug/Kg
N-Nitrosodiphenylamine		<MDL	36	70.2	ug/Kg		<MDL	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Naphthalene		<MDL,G	57	105	ug/Kg	250	G	70	131	ug/Kg		<MDL,G	55	103	ug/Kg
Nitrobenzene		<MDL	36	70.2	ug/Kg		<MDL,G	44	87.2	ug/Kg		<MDL	35	68.6	ug/Kg
Pentachlorophenol		<MDL,G	36	70.2	ug/Kg		<MDL,E,G	44	87.2	ug/Kg		<MDL,G	35	68.6	ug/Kg
Phenanthrene	102	G	21	35.2	ug/Kg	789	G	26	43.7	ug/Kg		<MDL,G	21	34.4	ug/Kg
Phenol		<MDL	140	211	ug/Kg	640	G	180	262	ug/Kg		<MDL	140	206	ug/Kg
Pyrene	179	G	21	35.2	ug/Kg	3960	G	26	43.7	ug/Kg	31	<RDL,G	21	34.4	ug/Kg
M.Code=SW-846 8270 (SIM)															
1,2,4-Trichlorobenzene		<MDL,G	0.91	1.75	ug/Kg		<MDL,G	1.1	2.18	ug/Kg		<MDL,G	0.89	1.71	ug/Kg
1,2-Dichlorobenzene		<MDL,G	0.91	1.75	ug/Kg		<MDL,G	1.1	2.18	ug/Kg		<MDL,G	0.89	1.71	ug/Kg
1,3-Dichlorobenzene		<MDL,G	0.91	1.75	ug/Kg		<MDL,G	1.1	2.18	ug/Kg		<MDL,G	0.89	1.71	ug/Kg
1,4-Dichlorobenzene		<MDL,G	0.91	1.75	ug/Kg		<MDL,G	1.1	2.18	ug/Kg		<MDL,G	0.89	1.71	ug/Kg
Hexachlorobenzene		<MDL,G	0.91	1.75	ug/Kg		<MDL,G	1.1	2.18	ug/Kg		<MDL,G	0.89	1.71	ug/Kg

* indicates wet weight used for th

METALS

M.Code=METRO 16-01-061															
Mercury, Total, CVAA	0.05	<RDL	0.024	0.233	mg/Kg	0.334		0.033	0.327	mg/Kg		<MDL	0.024	0.247	mg/Kg
M.Code=METRO 16-02-064															
Aluminum, Total, ICP	10200	L	6.9	34.1	mg/Kg	13700	L	3.7	43	mg/Kg	10800	-	6.6	33.1	mg/Kg
Antimony, Total, ICP		<MDL,G	2.1	10.3	mg/Kg		<MDL,G	2.6	12.9	mg/Kg		<MDL,G	1.9	9.91	mg/Kg
Arsenic, Total, ICP	4	<RDL	3.4	17.1	mg/Kg	7.4	<RDL	4.3	21.4	mg/Kg	3.3	<RDL	3.3	16.5	mg/Kg
Barium, Total, ICP											39.5		0.066	0.331	mg/Kg
Beryllium, Total, ICP	0.16	<RDL	0.069	0.341	mg/Kg	0.21	<RDL	0.087	0.43	mg/Kg	0.24	<RDL	0.066	0.331	mg/Kg
Cadmium, Total, ICP		<MDL	0.21	1.03	mg/Kg	0.49	<RDL	0.26	1.29	mg/Kg		<MDL	0.19	0.991	mg/Kg
Calcium, Total, ICP	3600		3.4	17.1	mg/Kg	4890		4.3	21.4	mg/Kg	3940		3.3	16.5	mg/Kg
Chromium, Total, ICP	14.5		0.34	1.71	mg/Kg	23.2		0.43	2.14	mg/Kg	11.9		0.33	1.65	mg/Kg
Copper, Total, ICP	14.9		0.28	1.37	mg/Kg	45.5		0.34	1.72	mg/Kg	11.5		0.27	1.33	mg/Kg
Iron, Total, ICP	18600	G	3.4	17.1	mg/Kg	22700	G	4.3	21.4	mg/Kg	17400		3.3	16.5	mg/Kg
Lead, Total, ICP	9.6	<RDL	2.1	10.3	mg/Kg	52.9		2.6	12.9	mg/Kg	4.6	<RDL	1.9	9.91	mg/Kg
Magnesium, Total, ICP	4300		2.1	10.3	mg/Kg	5480		2.6	12.9	mg/Kg	3800		1.9	9.91	mg/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53VG4	Locator:	P53VG5	Locator:	P53CI
	Sampled:	Aug 12, 96	Sampled:	Aug 12, 96	Sampled:	Aug 14, 96
	Lab ID:	L9209-9	Lab ID:	L9209-10	Lab ID:	L9316-1
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	75.9	% Solids:	61.1	% Solids:	77.7

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry WeightBasis					- Dry Weight Basis		
Molybdenum, Total, ICP		<MDL	1.3	6.84	mg/Kg		<MDL	1.8	8.59	mg/Kg		<MDL	1.3	6.6	mg/Kg
Nickel, Total, ICP	13.3		1.3	6.84	mg/Kg	20.1		1.8	8.59	mg/Kg	12		1.3	6.6	mg/Kg
Potassium, Total, ICP	1170		130	684	mg/Kg	1930		180	859	mg/Kg	969		130	660	mg/Kg
Selenium, Total, ICP		<MDL	3.4	17.1	mg/Kg		<MDL	4.3	21.4	mg/Kg		<MDL	3.3	16.5	mg/Kg
Silver, Total, ICP		<MDL	0.28	1.37	mg/Kg	0.7	<RDL	0.34	1.72	mg/Kg		<MDL	0.27	1.33	mg/Kg
Sodium, Total, ICP											3580		33	165	mg/Kg
Thallium, Total, ICP		<MDL	13	68.4	mg/Kg		<MDL	18	85.9	mg/Kg		<MDL	13	66	mg/Kg
Zinc, Total, ICP	48.7		0.34	1.71	mg/Kg	91.7		0.43	2.14	mg/Kg	45.2		0.33	1.65	mg/Kg
* indicates wet weight used for th															
CONVENTIONALS															
M.Code=PSEP p9															
p+0.00 *	5.7		0.1		%	1.7		0.1		%	3.3		0.1		%
p+1.00 *	36.5		0.1		%	20.2		0.1		%	35		0.1		%
p+10.0 *		<MDL	0.1		%	1.2		0.1		%	0.3		0.1		%
p+10.0(more than) *	1.2		0.1		%	5.8		0.1		%	1.1		0.1		%
p+2.00 *	44.3		0.1		%	36.1		0.1		%	46.5		0.1		%
p+3.00 *	4		0.1		%	9.6		0.1		%	5.9		0.1		%
p+4.00 *	0.7		0.1		%	3		0.1		%	0.8		0.1		%
p+5.00 *	2.1		0.1		%	3.9		0.1		%	1.8		0.1		%
p+6.00 *	0.5		0.1		%	6.2		0.1		%		<MDL	0.1		%
p+7.00 *	0.9		0.1		%	3.7		0.1		%	1.4		0.1		%
p+8.00 *	2.1		0.1		%	5		0.1		%	2.1		0.1		%
p+9.00 *	0.3		0.1		%	2.5		0.1		%	0.7		0.1		%
p-1.00 *	1.4		0.1		%	0.6		0.1		%	0.6		0.1		%
p-2.00 *		<MDL	0.1		%		<MDL	0.1		%	0.1		0.1		%
p-2.00(less than) *	0.2		0.1		%	0.3		0.1		%	0.4		0.1		%
M.Code=SM5310-B															
Total Organic Carbon	2640		6.6	13.2	mg/Kg	25500		8.2	16.4	mg/Kg	3530		6.4	12.9	mg/Kg
* indicates wet weight used for this parameter															

King County Environmental Lab Analytical Report

PROJECT: 423056

	Locator:	P53C4	Locator:	P53C5
	Sampled:	Aug 14, 96	Sampled:	Aug 15, 96
	Lab ID:	L9316-2	Lab ID:	L9316-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	93.7	% Solids:	80.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
ORGANICS										
M.Code=SW-846 8080										
4,4'-DDD		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
4,4'-DDE		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
4,4'-DDT		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Aldrin		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Alpha-BHC		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Aroclor 1016		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1221		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1232		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1242		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1248		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1254		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Aroclor 1260		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
Beta-BHC		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Chlordane		<MDL	7.2	14.2	ug/Kg		<MDL	8.3	16.5	ug/Kg
Delta-BHC		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Dieldrin		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Endosulfan I		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Endosulfan II		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Endosulfan Sulfate		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Endrin		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Endrin Aldehyde		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Gamma-BHC (Lindane)		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Heptachlor		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Heptachlor Epoxide		<MDL	1.4	2.85	ug/Kg		<MDL	1.6	3.32	ug/Kg
Methoxychlor		<MDL	7.2	14.2	ug/Kg		<MDL	8.3	16.5	ug/Kg
Toxaphene		<MDL	14	28.5	ug/Kg		<MDL	16	33.2	ug/Kg
M.Code=SW-846 8260										
1,1,1-Trichloroethane										
1,1,2,2-Tetrachloroethane										
1,1,2-Trichloroethane										
1,1,2-Trichloroethylene										
1,1-Dichloroethane										
1,1-Dichloroethylene										
1,2-Dichloroethane										
1,2-Dichloropropane										
2-Butanone (MEK)										
2-Chloroethylvinyl ether										

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53C4				Locator:	P53C5			
	Sampled:	Aug 14, 96				Sampled:	Aug 15, 96			
	Lab ID:	L9316-2				Lab ID:	L9316-3			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	93.7				% Solids:	80.5			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
2-Hexanone										
4-Methyl-2-Pentanone (MIBK)										
Acetone										
Acrolein										
Acrylonitrile										
Benzene										
Bromodichloromethane										
Bromoform										
Bromomethane										
Carbon Disulfide										
Carbon Tetrachloride										
Chorobenzene										
Chorodibromomethane										
Choroethane										
Choroform										
Choromethane										
Choromethane										
Cis-1,3-Dichloropropene										
Ethylbenzene										
Methylene Chloride										
Styrene										
Tetrachloroethylene										
Toluene										
Total Xylenes										
Trans-1,2-Dichloroethylene										
Trans-1,3-Dichloropropene										
Trichlorofluoromethane										
Viryl Acetate										
Viryl Chloride										
M.Code=SW-846 8270										
1,2-Diphenylhydrazine		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
2,4,5-Trichlorophenol		<MDL	120	227	ug/Kg		<MDL,G	140	265	ug/Kg
2,4,6-Trichlorophenol		<MDL	120	227	ug/Kg		<MDL,G	140	265	ug/Kg
2,4-Dichlorophenol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
2,4-Dimethylphenol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
2,4-Dinitrophenol		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
2,4-Dinitrotoluene		<MDL	12	22.7	ug/Kg		<MDL,G	14	26.5	ug/Kg
2,6-Dinitrotoluene		<MDL	12	22.7	ug/Kg		<MDL,G	14	26.5	ug/Kg
2-Chloronaphthalene		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
2-Chlorophenol		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53C4	Locator:	P53C5
	Sampled:	Aug 14, 96	Sampled:	Aug 15, 96
	Lab ID:	L9316-2	Lab ID:	L9316-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	93.7	% Solids:	80.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
2-Methylnaphthalene		<MDL	46	85.4	ug/Kg		<MDL,G	53	99.4	ug/Kg
2-Methylphenol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
2-Nitroaniline		<MDL	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
2-Nitrophenol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
3,3-Dichlorobenzidine		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
3-Nitroaniline		<MDL	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
4,6-Dinitro-O-Cresol		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	12	17.1	ug/Kg		<MDL,G	14	19.9	ug/Kg
4-Chloro-3-Methylphenol		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
4-Chloroaniline		<MDL,G	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
4-Methylphenol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
4-Nitroaniline		<MDL	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
4-Nitrophenol		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
Acenaphthene		<MDL	12	22.7	ug/Kg		<MDL,G	14	26.5	ug/Kg
Acenaphthylene		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Aniline		<MDL,G	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
Anthracene		<MDL,G	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Benzidine		<MDL,X	680	1370	ug/Kg		<MDL,X,G	800	1590	ug/Kg
Benzo(a)anthracene		<MDL,G	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Benzo(a)pyrene		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Benzo(b)fluoranthene		<MDL	46	85.4	ug/Kg		<MDL,G	53	99.4	ug/Kg
Benzo(g,h,i)perylene		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Benzo(k)fluoranthene		<MDL,G	46	85.4	ug/Kg		<MDL,G	53	99.4	ug/Kg
Benzoic Acid		<MDL	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
Benzyl Alcohol		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Benzyl Butyl Phthalate		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL	57	114	ug/Kg		<MDL,G	66	133	ug/Kg
Bis(2-Ethylhexyl)Phthalate		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Carbazole		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Chrysene		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Coprostanol		<MDL,E	120	171	ug/Kg		<MDL,G,E	140	199	ug/Kg
Di-N-Butyl Phthalate		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Di-N-Octyl Phthalate		<MDL	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Dibenzo(a,h)anthracene		<MDL	46	85.4	ug/Kg		<MDL,G	53	99.4	ug/Kg
Dibenzofuran		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Diethyl Phthalate		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Dimethyl Phthalate		<MDL	12	17.1	ug/Kg		<MDL,G	14	19.9	ug/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53C4	Locator:	P53C5
	Sampled:	Aug 14, 96	Sampled:	Aug 15, 96
	Lab ID:	L9316-2	Lab ID:	L9316-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	93.7	% Solids:	80.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
Fluoranthene		<MDL,G	17	34.2	ug/Kg		<MDL,G	20	39.8	ug/Kg
Fluorene		<MDL,G	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Hexachlorobutadiene		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Hexachlorocyclopentadiene		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Hexachloroethane		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Indeno(1,2,3-Cd)Pyrene		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Isophorone		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
N-Nitrosodimethylamine		<MDL,G	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
N-Nitrosodiphenylamine		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Naphthalene		<MDL,G	46	85.4	ug/Kg		<MDL,G	53	99.4	ug/Kg
Nitrobenzene		<MDL	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Pentachlorophenol		<MDL,G	29	56.9	ug/Kg		<MDL,G	34	66.2	ug/Kg
Phenanthrene		<MDL,G	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
Phenol		<MDL	120	171	ug/Kg		<MDL,G	140	199	ug/Kg
Pyrene		<MDL,G	17	28.5	ug/Kg		<MDL,G	20	33.2	ug/Kg
M.Code=SW-846 8270 (SIM)										
1,2,4-Trichlorobenzene		<MDL,G	0.74	1.42	ug/Kg		<MDL,G	0.86	1.65	ug/Kg
1,2-Dichlorobenzene		<MDL,G	0.74	1.42	ug/Kg		<MDL,G	0.86	1.65	ug/Kg
1,3-Dichlorobenzene		<MDL,G	0.74	1.42	ug/Kg		<MDL,G	0.86	1.65	ug/Kg
1,4-Dichlorobenzene		<MDL,G	0.74	1.42	ug/Kg		<MDL,G	0.86	1.65	ug/Kg
Hexachlorobenzene		<MDL,G	0.74	1.42	ug/Kg		<MDL,G	0.86	1.65	ug/Kg

* indicates wet weight used for th

METALS

M.Code=METRO 16-01-001										
Mercury, Total, CVAA		<MDL	0.02	0.199	mg/Kg		<MDL	0.025	0.243	mg/Kg
M.Code=METRO 16-02-004										
Aluminum, Total, ICP	9380	L	5.3	26.9	mg/Kg	9020	L	6.1	30.7	mg/Kg
Antimony, Total, ICP		<MDL,G	1.6	8.06	mg/Kg		<MDL,G	1.9	9.2	mg/Kg
Arsenic, Total, ICP	2.9	<RDL	2.7	13.4	mg/Kg	5.5	<RDL	3.1	15.3	mg/Kg
Barium, Total, ICP	32.3		0.053	0.269	mg/Kg	50.6		0.061	0.307	mg/Kg
Beryllium, Total, ICP	0.22	<RDL	0.053	0.269	mg/Kg	0.22	<RDL	0.061	0.307	mg/Kg
Cadmium, Total, ICP		<MDL	0.16	0.806	mg/Kg		<MDL	0.19	0.92	mg/Kg
Calcium, Total, ICP	3070		2.7	13.4	mg/Kg	2920		3.1	15.3	mg/Kg
Chromium, Total, ICP	11.8		0.27	1.34	mg/Kg	12.9		0.31	1.53	mg/Kg
Copper, Total, ICP	10.6		0.21	1.08	mg/Kg	10.5		0.25	1.23	mg/Kg
Iron, Total, ICP	16500		2.7	13.4	mg/Kg	18000		3.1	15.3	mg/Kg
Lead, Total, ICP	4.4	<RDL	1.6	8.06	mg/Kg	4.3	<RDL	1.9	9.2	mg/Kg
Magnesium, Total, ICP	3700		1.6	8.06	mg/Kg	3900		1.9	9.2	mg/Kg

King County Environmental Lab Analytical Report

PROJECT: 423056	Locator:	P53C4				Locator:	P53C5			
	Sampled:	Aug 14, 96				Sampled:	Aug 15, 96			
	Lab ID:	L9316-2				Lab ID:	L9316-3			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	93.7				% Solids:	80.5			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
Molybdenum, Total, ICP		<MDL	1.1	5.38	mg/Kg		<MDL	1.2	6.14	mg/Kg
Nickel, Total, ICP	11.6		1.1	5.38	mg/Kg	11.2		1.2	6.14	mg/Kg
Potassium, Total, ICP	952		110	538	mg/Kg	984		120	614	mg/Kg
Selenium, Total, ICP		<MDL	2.7	13.4	mg/Kg		<MDL	3.1	15.3	mg/Kg
Silver, Total, ICP		<MDL	0.21	1.08	mg/Kg		<MDL	0.25	1.23	mg/Kg
Sodium, Total, ICP	1540		27	134	mg/Kg	3200		31	153	mg/Kg
Thallium, Total, ICP		<MDL	11	53.8	mg/Kg		<MDL	12	61.4	mg/Kg
Zinc, Total, ICP	47.4		0.27	1.34	mg/Kg	45.5		0.31	1.53	mg/Kg
*indicates wet weight used for th										
CONVENTIONALS										
M.Code=PSEP p9										
p+0.00 *	5.2		0.1		%	5.5		0.1		%
p+1.00 *	36.8		0.1		%	38		0.1		%
p+10.0 *		<MDL	0.1		%		<MDL	0.1		%
p+10.0(more than) *		<MDL	0.1		%	3.1		0.1		%
p+2.00 *	48.3		0.1		%	46.6		0.1		%
p+3.00 *	4.5		0.1		%	3.5		0.1		%
p+4.00 *	0.3		0.1		%	0.4		0.1		%
p+5.00 *	0.3		0.1		%		<MDL	0.1		%
p+6.00 *		<MDL	0.1		%		<MDL	0.1		%
p+7.00 *	0.3		0.1		%		<MDL	0.1		%
p+8.00 *	2		0.1		%	0.5		0.1		%
p+9.00 *	0.3		0.1		%	0.1		0.1		%
p-1.00 *	1.3		0.1		%	1.1		0.1		%
p-2.00 *	0.1		0.1		%	0.1		0.1		%
p-2.00(less than) *	0.4		0.1		%	1.1		0.1		%
M.Code=SM5310-B										
Total Organic Carbon	1600		5.3	10.7	mg/Kg	2970		6.2	12.4	mg/Kg
*indicates wet weight used for this parameter										

APPENDIX D

1994 CHEMISTRY DATA

TABLE OF CONTENTS

METRO Environmental Laboratory Quality Assurance Review

	page(s)
• Table of Contents	1
• Introduction	2
• General Comments	2-4
• Conventionals	5-6
• Metals	7-9
• Organics	10-12
Tables	
• Table 1 Sample Inventory	13
• Table 2 Data Qualifiers	14
QC Data	
• Conventionals	not numbered
• Metals	not numbered
• Organics	not numbered

INTRODUCTION

This QA review accompanies data from samples submitted to the METRO Environmental Laboratory from the consultant Hart Crowser Inc. of Seattle Washington. This QA review is organized into four sections, as follows:

- General Comments
- Conventionals
- Metals
- Organics

An overview of the approach used for this QA review is detailed in the *General Comments* section which follows. Additional comments specific to each analysis are included in the appropriate section for that analysis.

This QA1 review has been conducted in accordance with guidelines established thorough the PSDDA program, primarily in the *Puget Sound Dredged Disposal Analysis Guidance Manual, Data Quality Evaluation for Proposed Dredged Material Disposal Projects*. Additionally, many of the approaches incorporated in this QA1 review have been established through collaboration between METRO and the Washington Department of Ecology Sediment Management Unit.

GENERAL COMMENTS

SCOPE OF SAMPLES SUBMITTED

This Quality Assurance Review is associated with Marine Sediment samples taken on 28 July and 29 July of 1994. These samples were taken in support of on-going studies conducted at Pier 53. Except where noted in the subcontracting sections of this QA review, all analyses have been conducted at the METRO Environmental Laboratory. The data are reported with associated data qualifiers and have undergone QA1 review, as summarized in this narrative report.

COMPLETENESS

Completeness has been evaluated for this data submission and QA review by considering the following criteria:

- Comparing available data with the planned project analytical scheme.
- Compliance with storage conditions, preservation requirements and hold times.
- A complete set of QC samples should be associated with each analysis.

Instances where these conditions are not met are noted in the appropriate section of this narrative.

METHODS

Methods are noted in the appropriate sections of this QA review.

TARGET LIST

The reported target list has been compared to the substances listed on the *Sediment Quality Standards-Chemical Criteria* to ensure that all applicable parameters have been analyzed, reported and included in this QA review.

DETECTION LIMITS

Achieved detection limits have been compared to the *Sediment Quality Standards-Chemical Criteria* to ensure that reported detection limits are sufficient to compare the reported data to the criteria values. This comparison is summarized in the appropriate sections of this report.

The METRO lab distinguishes between the Method Detection Limit (MDL) and the Reporting Detection Limit (RDL).

- The RDL is defined as the *minimum concentration of a constituent that can be reliably quantified.*
- The MDL is defined as *the minimum concentration of a constituent that can be detected.*

Some subcontractor data is available with an MDL only, in accordance with the subcontracting lab policies. All analytical data is reported with either a result or a detection limit.

HOLDING CONDITIONS AND TIMES

Holding conditions and times have been evaluated using guidelines established during the *Third Annual PSDDA Review Meeting.*

METHOD BLANK

Method blanks have been evaluated for the presence of positive results at or greater than the MDL. These instances and the qualification of the associated data are noted in the appropriate section.

STANDARD REFERENCE MATERIAL

Data have been qualified based on available SRM results. Instances of data reported without associated SRM analysis are noted in the narrative.

REPLICATES

Data have been qualified based on available replicate results. However, not all replicate data have been used as an indicator for data qualification. Only sets of replicate results which contain at least one result significantly greater than the MDL have been considered for data qualification. Where an RDL is present, only replicate data that contains at least one result greater than the RDL have been considered for data qualification. These guidelines have been used to account for the fact that precision obtained near the MDL is not representative of precision obtained throughout the entire analytical range.

MATRIX SPIKES

Matrix spikes have been used to qualify data for both organics and metals data. Matrix spikes are not required for conventionals parameters.

DATA QUALIFIERS

The data qualification system used for this data submission is listed in Table 2 of this QA review. These data qualifiers address situations which require qualification, according to QA1 guidance. The exact qualifiers used generally conform to QA1 guidance. METRO qualifiers indicating <MDL and <RDL have been used as replacements for the *T* and *U* specified under QA1 guidance.

UNITS AND SIGNIFICANT FIGURES

Data have been reported in accordance with lab policy at the time of data generation. When an RDL and MDL are reported, data have been reported to three significant figures above the RDL, and two significant figures equal to or below the RDL. Data with only an MDL have been reported to two significant figures.

All inorganic analytical results are reported in mg/Kg on a dry weight basis, whereas organic results are in ug/Kg on a dry weight basis.

Data is stored in wet weight basis on the data base and converted to dry weight basis during the reporting process. Should only one reported digit be available, rounding error can be significant. This rounding error can occur during the conversion from wet to dry weight.

SUBCONTRACTING

Analysis which have been subcontracted, and the issues associated with these subcontracted analyses are noted in this narrative. Note that the following parameter has always been submitted to a subcontractor for analysis:

- total organic carbon

CONVENTIONALS

COMPLETENESS

Results for all requested parameters are included in this report.

A total of 7 samples were analyzed for total solids (TOTS), particle size distribution (PSD) and total organic carbon (TOC). A complete set of QC samples are reported for all parameters.

Hold time exceedances occurred for some of the parameters and are discussed further in the hold time section.

SUBCONTRACTING

PSD was subcontracted to AmTest Inc. in Redmond, Washington.

METHODS

For TOC, PSEP (page 23) was used for preparation and SW 9060 was used for analysis. Please note that SM 5310-B is referenced for TOC analysis. The comprehensive report method code refers to the analytical method which is equivalent to the SW 9060 used to determine the TOC data. For Percent Solids, SM 2540 was used to perform the analysis. For PSD, PSEP (page 9) was used to perform the analysis. The optional peroxide digestion was not used, and particle size distribution was determined on the entire sample.

TARGET LIST

The reported phi size target list for particle size distribution corresponds to data obtained from the subcontracting laboratory

DETECTION LIMITS

A positive result has been reported for all TOTS and TOC analyses. An MDL and RDL are reported for TOC. A positive result or MDL has been reported for all PSD phi sizes.

HOLDING CONDITIONS AND TIMES

All the analyses for PSD were completed within the recommended holding times for analysis. For PSD the recommended holding time is six months for refrigerated samples.

All the analyses for TOC and total solids were completed within 28 days of receipt. Twenty eight days is a commonly recognized hold time for these parameters. For this project, however, the recommended holding time for TOC and total solids analysis is 14 days for refrigerated samples. The analysis was not completed within the required 14 days. Note that these samples were received by the METRO lab well into the specified hold time.

METHOD BLANK

One unique method blank has been reported for TOC analysis. There is no indication of positive bias in the method blank results, and the data have not been qualified because of method blank contamination. Similarly for TOTS, one unique blank has been reported with no apparent positive bias.

STANDARD REFERENCE MATERIAL

One TOC SRM sample has been reported in association with the reported samples. The percent recovery was acceptable and well within the 80-120% range used to indicate data qualification.

REPLICATES

For TOC, one triplicate has been included in the data submission. The RSD was within acceptance windows. The TOC data have not been qualified based on the analytical results of sample replicates.

For TOTS, one triplicate sample has been included in the data submission. The RSD was well within the acceptance windows. Percent solids have not been qualified based on the analytical results of sample replicate or triplicates.

For PSD, one triplicate sample has been included in the data submission. The RSD for a number of phi sizes was well outside the acceptable window. Poor precision was observed throughout the range without a consistent pattern. All PSD data have been qualified with the data qualifier E.

UNITS AND SIGNIFICANT FIGURES

Data are reported in accordance with lab policy at the time of data generation.

TOC data are reported in ppm on a dry weight basis. Total Solids and PSD data are reported in percent.

METALS

COMPLETENESS

Data are reported for all parameters listed in Table 1. These data have been evaluated for completeness, and those comments are noted below.

All metal samples reported in this data submission have been analyzed in conjunction with a Standard Reference Material, Method Blank and Replicate. The sample selected for QC is a part of this data submission.

Sample storage conditions were not complaint for samples reported in this data submission. Further discussion will be addressed in the "hold time " section.

METHODS

The descriptive heading information "M.Code=" on the data report associates the elements in this data set with the specific method used for trace metals determination. The methods and their associated *M. CODE* used for the analysis of trace metals in this data set are listed in the table below .

Listing of Metals Methods

M.CODE	METHOD
PE	EPA Method 3050/6010
CV	EPA Method 7471

TARGET LIST

The reported target list contains all *Sediment Quality Standards-Chemical Criteria* metals for all samples. Additional metals have been reported as available.

DETECTION LIMITS

A positive result, MDL and RDL have been reported for all metals. All reported detection limits for metals analysis are below *Sediment Quality Standards-Chemical Criteria* for metals.

HOLDING CONDITIONS AND TIMES

Sample storage conditions have been evaluated using guidelines established during the *Third Annual PSDDA Review Meeting*. The criteria used to evaluate storage conditions for these analyses are listed in the table below.

PARAMETER	FROZEN HOLD TIME	REFRIGERATED HOLD TIME	COMMENT
metals	2 years	6 months	*psdda guidance*
mercury	28 days	not recommended	*none*

All metals samples reported in this data submission were placed into refrigeration after collection and had never been frozen. Refrigeration is a commonly approved storage technique for mercury but is not approved for this program. Sample preparation and analysis for Mercury was completed within 21 days after samples were collected.

METHOD BLANK

Method blank contamination was not factor affecting data quality. All method blank

results were below the MDL.

Metals results are not corrected for the concentrations of metals determined in the method blanks.

STANDARD REFERENCE MATERIAL

The reference materials analyzed in association with reported METRO analytical results are listed below:

SRM	Comment
NR CC-PACS 1	does not contain silver

SRM Recovery of less than 80% has not been used as an indicator to qualify associated data. This is due to the fact that the digestion technique used for the reported samples is different from the one used to determine the SRM certified values.

SRM recovery of less than 80% and concurrent/compliant matrix spike recovery of greater than 75% was observed for the following elements: Cd, Cr, Ni. In accordance with qualification criteria outlined in this section and Table 2, associated data were not qualified.

SRM recovery of less than 50% was observed for Sb. Instances where the SRM recovery is below 50% are noted in the table below:

AFFECTED SAMPLES	SRM RECOVERY	MATRIX SPIKE RECOVERY
L4298-1 to L4298-7	Sb=39%	Sb=34%

REPLICATES

In general, reported RPD's for replicate samples included in this QA review are compliant and have not resulted in data qualification. Data associated with replicate RPD of greater than 20% have been qualified with the data qualifier "E".

MATRIX SPIKES

Note that matrix spike recoveries have also been included in the SRM recovery discussion.

Data associated with matrix spike recoveries which have not met the 75% to 125% criteria have been qualified with either the "G" or "L" flag, whichever is appropriate.

Matrix spike recoveries of note are listed in the Table below:

SAMPLES	COMMENT
L4298-1 to L4298-7	Mn=178% matrix spike, qualified with L Sb=34% matrix spike, qualified with G

UNITS AND SIGNIFICANT FIGURES

Data are reported in accordance with lab policy at the time of data generation. Metals sample results are reported in units of mg/Kg on a dry weight basis. Date are reported to three significant figures above the RDL and two significant figures when equal to or below the RDL.

Note that quality control samples such as spikes, duplicates and SRM material are reported in units of mg/L. This does not indicate that these quality control samples were performed on a water matrix. Rather,

sufficient information was available in the reported format (mg/L) to calculate information such as percent recoveries and qualify the data as needed. Because sufficient information was available to qualify the data, the data has not been calculated on a soil basis. Based on method dilution factors, the reported data may be converted to a soil basis by multiplying by a factor of 50. This calculation assumes a typical sample size of 1 gram wet weight and a final volume of
50 mL.

ORGANICS

COMPLETENESS

Data are reported for all parameters listed in Table 1 These data have been evaluated for completeness, and those comments are noted below.

All samples are accompanied by a method blank and reported surrogate recoveries. All samples are accompanied by a matrix spike and matrix spike duplicate. Note that for BNA and pesticides the marine sediment sample selected for spiking is not a sample from this sample set. These MS/MSD have been spiked and analyzed for all target compounds for BNA and volatiles. The spike target list for the pesticides matrix spike includes nearly all target compounds. The non spike list for pesticides is indicated in the QC summary. Replicate and SRM samples have not been analyzed with this data submission. Note that the matrix spike duplicate recoveries provide useful information regarding replication of results.

All samples were analyzed within hold time.

METHODS

Analyses were performed in accordance with EPA methods SW-846, -8270, -8080, -8260 for BNA, PEST/PCB, and VOA, respectively.

TARGET LIST

The BNA target list includes all *Sediment Quality Standards-Chemical Criteria* compounds with the exception of benzo(j)fluoranthene. Note that all three of the benzo-fluoranthene isomers elute in the same region of the chromatogram. The organics section has verified that the analytical conditions used are sufficient to calculate a total benzo-fluoranthene result using the *b* and *k* isomers reported.

Because there are no *Sediment Quality Standards-Chemical Criteria* for pesticides and volatiles, these target lists have been compared to the PSDDA Chemicals of Concern list.

The reported pesticides target list complies with the PSDDA pesticides of concern. It should be noted that DDT, DDE, and DDD have been reported as p,p' isomers. The reported PCB data includes Aroclors 1016, 1221, 1232, 1242, 1248, 1254, and 1260.

The reported volatile organics target list includes all of the PSDDA volatile compounds of concern.

DETECTION LIMITS

A positive result, MDL, and RDL have been reported for all organics parameters. In general, reported detection limits for organics analysis are below *Sediment Quality Standards-Chemical Criteria* for organics. Note that TOC normalized detection limits for chlorinated benzenes generally exceed SQS criteria. Additionally, the detection limit for 2,4-dimethyl phenol exceeds the SQS criteria.

HOLDING CONDITIONS AND TIMES

Sample storage conditions have been evaluated using guidelines established during the *Third Annual PSDDA Review Meeting*. The criteria used to evaluate storage conditions for these analyses are listed in the table below.

PARAMETER	FROZEN HOLD TIME	REFRIGERATED HOLD TIME	*COMMENT*
volatiles	NA	14 days	*none*
BNA	1 year	14 days	*40 days to analyze*
pesticides/PCB	1 year	14 days	*40 days to analyze*

All samples were analyzed within hold time.

METHOD BLANK

No contaminants were detected in any PEST/PCB method blanks. Where contaminants were detected in method blanks the associated data have been qualified with "B".

Significant method blank contamination issues are noted in the table below:

SAMPLES	Comment
L4298-1 through L4298-7	Bis(2-ethylhexyl)phthalate and Di-N-butylphthalate >MDL, samples qualified with B
L4298-1, L4298-3, L4298-4, L4298-5, L4298-7	Methylene chloride, Chloroform, Acetone, 1,1,2,2-Tetrachloroethane >MDL, samples qualified with B
L4298-2, L4298-6	Methylene chloride , chloroform, acetone> MDL, samples qualified with B

STANDARD REFERENCE MATERIAL

No SRM was extracted with this data set.

REPLICATES

Sample replicates were not analyzed for organics parameters for this data submission. Matrix spike replicates were analyzed and are reported with this data submission. Matrix spike and matrix spike replicate recoveries and RPD of those recoveries were calculated and this data is included in this QA review. Data have not been qualified due to MS/MSD RPD.

MATRIX SPIKES

Data requiring qualification due to non-compliant matrix spike recovery are summarized in the tables below:

Summary of VOA Matrix Spike Recoveries Outside Acceptance Limits

SITUATION	COMPOUNDS	SAMPLES AFFECTED
matrix spike recoveries >150%, compounds qualified with L	Acetone, MEK,	L4298-1 through L4298-7
matrix spike recoveries <50%, compound qualified with G	Vinyl acetate	L4298-1 through L4298-7
matrix spike recoveries <10%, compounds qualified with X	Acrolein	L4298-1 through L4298-7

Summary of BNA Matrix Spike Recoveries Outside Acceptance Limits

SITUATION	COMPOUNDS	SAMPLES AFFECTED
matrix spike recoveries <50%, compounds qualified with G	Hexachloroethane, Benzo(g,h,i)perylene, 4-Chloroaniline, 4-Nitroaniline	L4298-1 through L4298-7
matrix spike recoveries >150%, compounds qualified with J	2,4,6-trichlorophenol, 4-Nitrophenol, 1,2-Diphenylhydrazine, Carbazole	L4298-1 through L4298-7
matrix spike recoveries <10%, compounds qualified with X	Hexachlorocyclopentadiene, Benzidine, 3,3'-Dichlorobenzidine Aniline	L4298-1 through L4298-7

Summary of Pest/PCB Matrix Spike Recoveries Outside Acceptance Limits

SITUATION	COMPOUNDS	SAMPLES AFFECTED
matrix spike recoveries >150%, compounds qualified with L	Aroclor 1260	L4298-1 through L4298-7

Note that the high aroclor 1260 recovery appears to be due, at least in part, to poor sample homogeneity.

UNITS AND SIGNIFICANT FIGURES

Data are reported in accordance with lab policy at the time of data generation. Organics results are reported in ug/Kg on a dry weight basis. Results above the RDL are reported to three significant figures. Results equal to or below the RDL are reported to two significant figures.

Note that quality control samples such as spikes, duplicates and SRM material are reported in units of mg/L. This does not indicate that these quality control samples were performed on a water matrix. Rather, sufficient information was available in the reported format (mg/L) to calculate information such as percent recoveries and qualify the data as needed.

SURROGATES

Surrogate recoveries for all parameters and samples analyzed were within QC limits with the exception of the following:

Summary of Non Compliant Surrogate Recoveries

SITUATION	COMPOUNDS	SAMPLE AFFECTED
BNA Surrogate recoveries >150%	2.4.6. tribromophenol	L4298-1 through L4298-7

The above instances do not meet criteria for qualification as detailed in Table 2. Only when all surrogates for a fraction are non compliant are criteria met for data qualification.

Table 1 page 1 of 1

Sample Inventory for Pier 53/Hart Crowser 1994
Project A44703

STATION	SAMPLE DEPTH IN CM.	SAMPLE DATE	LATITUDE	LONGITUDE	SAMPLE NUMBER	BNA	VOA	PEST/PCB	METAL	PERCENT SOLIDS	TOC	PSD
P53VG1	0-10 cm	940729	47 36' 14"	122 20' 24"	4298-1	X	X	X	X	X	X	X
P53VG3	0-10 cm	940728	47 36' 17"	122 20' 25"	4298-2	X	X	X	X	X	X	X
P53VG5	0-10 cm	940729	47 36' 14"	122 20' 21"	4298-3	X	X	X	X	X	X	X
P53VG6	0-10 cm	940729	47 36' 15"	122 20'22"	4298-4	X	X	X	X	X	X	X
P53VG8	0-10 cm	940729	47 36' 12"	122 20' 23"	4298-5	X	X	X	X	X	X	X
P53VG10	0-10 cm	940729	47 36' 13"	122 20' 19"	4298-6	X	X	X	X	X	X	X
P53VG11	0-10 cm	940729	47 36' 13"	122 20' 20"	4298-7	X	X	X	X	X	X	X

Table 2. Summary of Data Qualifiers Used

Condition to Qualify	SEDQUAL Qualifier	Organics QC Limits	Metals QC Limits	Conventionals QC Limits	METRO Equivalent Qualifier
very low matrix spike recovery	X	< 10 %	< 10 %	NA	X
low matrix spike recovery	G	< 50%	< 75%	NA	G
high matrix spike recovery	L	> 150%	>125%	NA	L
low SRM recovery	G	SRM not available	NA	< 80%*	G
high SRM recovery	L	SRM not available	>120%	>120%*	L
high duplicate RPD	E	>100 %	>20%	> 20 %	E, estimated
high triplicate RSD	E	> 100%	NA	> 20 %	E, estimated
less than the reporting detection limit	T	NA	NA	NA	< RDL
less than the method detection limit	U	NA	NA	NA	< MDL
contamination reported in blank	B	> MDL	> MDL	> MDL	B
very biased data, based on surrogate recoveries	X	all fraction surrogates are <10%	NA	NA	X
biased data, based on surrogate recoveries	E	all fraction surrogates are < 50% or >150%	NA	NA	E, estimated
estimate based on presumptive evidence	N	NA	NA	NA	J# used to indicate the presence of TIC's
rejected, unusable for all purposes	R	NA	NA	NA	R

* Note that PSDDA guidance uses a 95% confidence window for this parameter/qualification.

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator:	P53VG1	P53VG3	P53VG5
Sampled:	Jul 29, 94	Jul 28, 94	Jul 29, 94
Lab ID:	L4298-1	L4298-2	L4298-3
Matrix:	SALTWTRSED	SALTWTRSED	SALTWTRSED
% Solids:	80.7	61.7	62.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
ORGANICS															
M.Code=SW-846 8080															
4,4'-DDD		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg	11.1		2.1	4.27	ug/Kg
4,4'-DDE		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg	5.18		2.1	4.27	ug/Kg
4,4'-DDT		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg	288		2.1	4.27	ug/Kg
Aldrin		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Alpha-BHC		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Aroclor 1016		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
Aroclor 1221		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
Aroclor 1232		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
Aroclor 1242		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
Aroclor 1248		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
Aroclor 1254		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg	37	<RDL	21	42.7	ug/Kg
Aroclor 1260		<NDL,L	16	33.1	ug/Kg	29	<RDL,L	21	43.3	ug/Kg	43.4	L	21	42.7	ug/Kg
Beta-BHC		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Chlordane		<MDL	9.9	16.5	ug/Kg		<MDL	13	21.6	ug/Kg		<MDL	13	21.3	ug/Kg
Delta-BHC		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Dieldrin		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Endosulfan I		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Endosulfan II		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Endosulfan Sulfate		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Endrin		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Endrin Aldehyde		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Gamma-BHC (Lindane)		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Heptachlor		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Heptachlor Epoxide		<MDL	1.6	3.31	ug/Kg		<MDL	2.1	4.33	ug/Kg		<MDL	2.1	4.27	ug/Kg
Methoxychlor		<MDL	9.9	16.5	ug/Kg		<MDL	13	21.6	ug/Kg		<MDL	13	21.3	ug/Kg
Toxaphene		<MDL	16	33.1	ug/Kg		<MDL	21	43.3	ug/Kg		<MDL	21	42.7	ug/Kg
M.Code=SW-846 8260															
1,1,1-Trichloroethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL,B	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL,B	8	16	ug/Kg
1,1,2-Trichloroethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,1,2-Trichloroethylene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,1-Dichloroethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,1-Dichloroethylene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,2-Dichloroethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
1,2-Dichloropropane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
2-Butanone (MEK)		<MDL,L	31	62	ug/Kg		<MDL,L	41	81	ug/Kg	45	<RDL,L	40	80	ug/Kg
2-Chloroethylvinyl ether		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
2-Hexanone		<MDL	31	62	ug/Kg		<MDL	41	81	ug/Kg		<MDL	40	80	ug/Kg
4-Methyl-2-Pentanone (MIBK)		<MDL	31	62	ug/Kg		<MDL	41	81	ug/Kg		<MDL	40	80	ug/Kg
Acetone	78.4	B,L	31	62	ug/Kg	79	<RDL,B,L	41	81	ug/Kg	174	B,L	40	80	ug/Kg
Acrolein		<MDL,X	31	62	ug/Kg		<MDL,X	41	81	ug/Kg		<MDL,X	40	80	ug/Kg
Acrylonitrile		<MDL	31	62	ug/Kg		<MDL	41	81	ug/Kg		<MDL	40	80	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

	Locator:	P53VG1	Locator:	P53VG3	Locator:	P53VG5
	Sampled:	Jul 29, 94	Sampled:	Jul 28, 94	Sampled:	Jul 29, 94
	Lab ID:	L4298-1	Lab ID:	L4298-2	Lab ID:	L4298-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	80.7	% Solids:	61.7	% Solids:	62.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Benzene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Bromodichloromethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Bromoform		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Bromomethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Carbon Disulfide		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg	9.8	<RDL	8	16	ug/Kg
Carbon Tetrachloride		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Chlorobenzene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Chlorodibromomethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Chloroethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Chloroform	13.3	B	6.2	12.4	ug/Kg		<MDL,B	8.1	16.2	ug/Kg	25.8	B	8	16	ug/Kg
Chloromethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Chloromethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
cis-1,3-Dichloropropene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Ethylbenzene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Methylene Chloride	56	<RDL,B	31	62	ug/Kg	84.1	B	41	81	ug/Kg	99.4	B	40	80	ug/Kg
Styrene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Tetrachloroethylene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Toluene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Total Xylenes		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Trans-1,2-Dichloroethylene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Trans-1,3-Dichloropropene		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Trichlorofluoromethane		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
Vinyl Acetate		<MDL,G	31	62	ug/Kg		<MDL,G	41	81	ug/Kg		<MDL,G	40	80	ug/Kg
Vinyl Chloride		<MDL	6.2	12.4	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	8	16	ug/Kg
M.Code=SW-846 8270															
1,2,4-Trichlorobenzene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
1,2-Dichlorobenzene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
1,2-Diphenylhydrazine		<MDL,L	66	133	ug/Kg		<MDL,L	86	173	ug/Kg		<MDL,L	85	171	ug/Kg
1,3-Dichlorobenzene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
1,4-Dichlorobenzene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
2,4,5-Trichlorophenol		<MDL	140	264	ug/Kg		<MDL	180	345	ug/Kg		<MDL	180	341	ug/Kg
2,4,6-Trichlorophenol		<MDL,L	140	264	ug/Kg		<MDL,L	180	345	ug/Kg		<MDL,L	180	341	ug/Kg
2,4-Dichlorophenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
2,4-Dimethylphenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
2,4-Dinitrophenol		<MDL	66	133	ug/Kg		<MDL	86	173	ug/Kg		<MDL	85	171	ug/Kg
2,4-Dinitrotoluene		<MDL	14	26.4	ug/Kg		<MDL	18	34.5	ug/Kg		<MDL	18	34.1	ug/Kg
2,6-Dinitrotoluene		<MDL	14	26.4	ug/Kg		<MDL	18	34.5	ug/Kg		<MDL	18	34.1	ug/Kg
2-Chloronaphthalene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
2-Chlorophenol		<MDL	66	133	ug/Kg		<MDL	86	173	ug/Kg		<MDL	85	171	ug/Kg
2-Methylnaphthalene		<MDL	53	99.1	ug/Kg		<MDL	70	130	ug/Kg	129		69	128	ug/Kg
2-Methylphenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
2-Nitroaniline		<MDL	140	198	ug/Kg		<MDL	180	259	ug/Kg		<MDL	180	256	ug/Kg
2-Nitrophenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
3,3'-Dichlorobenzidine		<MDL,X	33	66	ug/Kg		<MDL,X	44	86.4	ug/Kg		<MDL,X	43	85.3	ug/Kg
3-Nitroaniline		<MDL	140	198	ug/Kg		<MDL	180	259	ug/Kg		<MDL	180	256	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

	P53VG1	P53VG3	P53VG5
Locator:	P53VG1	P53VG3	P53VG5
Sampled:	Jul 29, 94	Jul 28, 94	Jul 29, 94
Lab ID:	L4298-1	L4298-2	L4298-3
Matrix:	SALTWTRSED	SALTWTRSED	SALTWTRSED
% Solids:	80.7	61.7	62.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
4,6-Dinitro-O-Cresol		<MDL	66	133	ug/Kg		<MDL	86	173	ug/Kg		<MDL	85	171	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	14	19.8	ug/Kg		<MDL	18	25.9	ug/Kg		<MDL	18	25.6	ug/Kg
4-Chloro-3-Methylphenol		<MDL	66	133	ug/Kg		<MDL	86	173	ug/Kg		<MDL	85	171	ug/Kg
4-Chloroaniline		<MDL,G	66	133	ug/Kg		<MDL,G	86	173	ug/Kg		<MDL,G	85	171	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
4-Methylphenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
4-Nitroaniline		<MDL,G	140	198	ug/Kg		<MDL,G	180	259	ug/Kg		<MDL,G	180	256	ug/Kg
4-Nitrophenol		<MDL,L	66	133	ug/Kg		<MDL,L	86	173	ug/Kg		<MDL,L	85	171	ug/Kg
Acenaphthene		<MDL	14	26.4	ug/Kg	50.6		18	34.5	ug/Kg	323		18	34.1	ug/Kg
Acenaphthylene		<MDL	20	33.1	ug/Kg	44.7		26	43.3	ug/Kg	163		26	42.7	ug/Kg
Aniline		<MDL,X	66	133	ug/Kg		<MDL,X	86	173	ug/Kg		<MDL,X	85	171	ug/Kg
Anthracene		<MDL	20	33.1	ug/Kg	365		26	43.3	ug/Kg	1480		26	42.7	ug/Kg
Benzidine		<MDL,X	790	1590	ug/Kg		<MDL,X	1000	2070	ug/Kg		<MDL,X	1000	2050	ug/Kg
Benzo(a)anthracene	25	<RDL	20	33.1	ug/Kg	744		26	43.3	ug/Kg	4620		26	42.7	ug/Kg
Benzo(a)pyrene		<MDL	33	66	ug/Kg	630		44	86.4	ug/Kg	2160		43	85.3	ug/Kg
Benzo(b)fluoranthene		<MDL	53	99.1	ug/Kg	1010		70	130	ug/Kg	3580		69	128	ug/Kg
Benzo(g,h,i)perylene	57	<RDL,G	33	66	ug/Kg	288	G	44	86.4	ug/Kg	346	G	43	85.3	ug/Kg
Benzo(k)fluoranthene		<MDL	53	99.1	ug/Kg	329		70	130	ug/Kg	1200		69	128	ug/Kg
Benzoic Acid		<MDL	140	198	ug/Kg	230	<RDL	180	259	ug/Kg	294		180	256	ug/Kg
Benzyl Alcohol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Benzyl Butyl Phthalate		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL	66	133	ug/Kg		<MDL	86	173	ug/Kg		<MDL	85	171	ug/Kg
Bis(2-Ethylhexyl)Phthalate	51.7	B	20	33.1	ug/Kg	222	B	26	43.3	ug/Kg	317	B	26	42.7	ug/Kg
Carbazole		<MDL,L	33	66	ug/Kg	147	L	44	86.4	ug/Kg	549	L	43	85.3	ug/Kg
Chrysene	37.5		20	33.1	ug/Kg	1060		26	43.3	ug/Kg	3660		26	42.7	ug/Kg
Coprostanol		<MDL	140	198	ug/Kg	502		180	259	ug/Kg	862		180	256	ug/Kg
Di-N-Butyl Phthalate	74.2	B	33	66	ug/Kg	191	B	44	86.4	ug/Kg	173	B	43	85.3	ug/Kg
Di-N-Octyl Phthalate		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
Dibenzo(a,h)anthracene		<MDL	53	99.1	ug/Kg	110	<RDL	70	130	ug/Kg	192		69	128	ug/Kg
Dibenzofuran		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg	318		43	85.3	ug/Kg
Diethyl Phthalate		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Dimethyl Phthalate		<MDL	14	19.8	ug/Kg		<MDL	18	25.9	ug/Kg		<MDL	18	25.6	ug/Kg
Fluoranthene	62.6		20	39.7	ug/Kg	1410		26	51.9	ug/Kg	16600		26	51.2	ug/Kg
Fluorene		<MDL	20	33.1	ug/Kg	92.5		26	43.3	ug/Kg	571		26	42.7	ug/Kg
Hexachlorobenzene		<MDL	20	33.1	ug/Kg		<MDL	26	43.3	ug/Kg		<MDL	26	42.7	ug/Kg
Hexachlorobutadiene		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Hexachlorocyclopentadiene		<MDL,X	33	66	ug/Kg		<MDL,X	44	86.4	ug/Kg		<MDL,X	43	85.3	ug/Kg
Hexachloroethane		<MDL,G	33	66	ug/Kg		<MDL,G	44	86.4	ug/Kg		<MDL,G	43	85.3	ug/Kg
Indeno(1,2,3-Cd)Pyrene		<MDL	33	66	ug/Kg	387		44	86.4	ug/Kg	634		43	85.3	ug/Kg
Isophorone		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
N-Nitrosodimethylamine		<MDL	140	198	ug/Kg		<MDL	180	259	ug/Kg		<MDL	180	256	ug/Kg
N-Nitrosodiphenylamine		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

	Locator:	P53VG1	Locator:	P53VG3	Locator:	P53VG5
	Sampled:	Jul 29, 94	Sampled:	Jul 28, 94	Sampled:	Jul 29, 94
	Lab ID:	L4298-1	Lab ID:	L4298-2	Lab ID:	L4298-3
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	80.7	% Solids:	61.7	% Solids:	62.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Naphthalene		<MDL	53	99.1	ug/Kg		<MDL	70	130	ug/Kg	517		69	128	ug/Kg
Nitrobenzene		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Pentachlorophenol		<MDL	33	66	ug/Kg		<MDL	44	86.4	ug/Kg		<MDL	43	85.3	ug/Kg
Phenanthrene		<MDL	20	33.1	ug/Kg	512		26	43.3	ug/Kg	1890		26	42.7	ug/Kg
Phenol		<MDL	140	198	ug/Kg		<MDL	180	259	ug/Kg		<MDL	180	256	ug/Kg
Pyrene	38		20	33.1	ug/Kg	956		26	43.3	ug/Kg	7580		26	42.7	ug/Kg
METALS															
M.Code=METRO 16-01-005															
Mercury, Total, CVAA	0.047	<RDL	0.025	0.247	mg/Kg	0.13	<RDL	0.032	0.327	mg/Kg	0.418		0.032	0.312	mg/Kg
M.Code=METRO 16-02-004															
Aluminum, Total, ICP	9640		12	61.5	mg/Kg	13500		16	81	mg/Kg	12300		16	79.4	mg/Kg
Antimony, Total, ICP		<MDL,G	3.7	18.5	mg/Kg		<MDL,G	4.9	24.3	mg/Kg		<MDL,G	4.8	23.8	mg/Kg
Arsenic, Total, ICP	14	<RDL	6.2	30.7	mg/Kg	14	<RDL	8.1	40.5	mg/Kg	16	<RDL	8	39.7	mg/Kg
Barium, Total, ICP	46	E	0.12	0.615	mg/Kg	42.6	E	0.16	0.81	mg/Kg	48.8	E	0.16	0.794	mg/Kg
Beryllium, Total, ICP	0.25	<RDL	0.12	0.615	mg/Kg	0.34	<RDL	0.16	0.81	mg/Kg	0.3	<RDL	0.16	0.794	mg/Kg
Cadmium, Total, ICP		<MDL	0.37	1.85	mg/Kg		<MDL	0.49	2.43	mg/Kg	0.56	<RDL	0.48	2.38	mg/Kg
Calcium, Total, ICP	3400		6.2	30.7	mg/Kg	4730		8.1	40.5	mg/Kg	4300		8	39.7	mg/Kg
Chromium, Total, ICP	13		0.62	3.07	mg/Kg	23.5		0.81	4.05	mg/Kg	23.4		0.8	3.97	mg/Kg
Copper, Total, ICP	12.3		0.5	2.45	mg/Kg	29.8		0.65	3.24	mg/Kg	39.7		0.64	3.17	mg/Kg
Iron, Total, ICP	20000		6.2	30.7	mg/Kg	22500		8.1	40.5	mg/Kg	21900		8	39.7	mg/Kg
Lead, Total, ICP	6.9	<RDL	3.7	18.5	mg/Kg	27.9		4.9	24.3	mg/Kg	44.5		4.8	23.8	mg/Kg
Magnesium, Total, ICP	4050	E	3.7	18.5	mg/Kg	5610	E	4.9	24.3	mg/Kg	5100	E	4.8	23.8	mg/Kg
Manganese, Total, ICP	201	L	0.25	1.23	mg/Kg	222	L	0.32	1.62	mg/Kg	221	L	0.32	1.59	mg/Kg
Molybdenum, Total, ICP		<MDL	2.5	12.3	mg/Kg		<MDL	3.2	16.2	mg/Kg		<MDL	3.2	15.9	mg/Kg
Nickel, Total, ICP	12.3		2.5	12.3	mg/Kg	17.5		3.2	16.2	mg/Kg	17.1		3.2	15.9	mg/Kg
Selenium, Total, ICP		<MDL	6.2	30.7	mg/Kg		<MDL	8.1	40.5	mg/Kg		<MDL	8	39.7	mg/Kg
Silver, Total, ICP		<MDL	0.5	2.45	mg/Kg		<MDL	0.65	3.24	mg/Kg	0.75	<RDL	0.64	3.17	mg/Kg
Sodium, Total, ICP	3140		62	307	mg/Kg	7120		81	405	mg/Kg	7120		80	397	mg/Kg
Thallium, Total, ICP		<MDL	25	123	mg/Kg		<MDL	32	162	mg/Kg		<MDL	32	159	mg/Kg
Zinc, Total, ICP	47.5		0.62	3.07	mg/Kg	72		0.81	4.05	mg/Kg	86.7		0.8	3.97	mg/Kg
CONVENTIONALS															
M.Code=SM5310-B															
Total Organic Carbon	3070		6.2	12.4	mg/Kg	1700		8.1	16.2	mg/Kg	15100		8	16	mg/Kg
M.Code=(No Method Code)															
p-2.25	0.5	E	0.1		%	0.9	E	0.1		%		<MDL,E	0.1		%
p-2.00		<MDL,E	0.1		%	0.2	E	0.1		%		<MDL,E	0.1		%
p-1.00	3.8	E	0.1		%	0.5	E	0.1		%	0.5	E	0.1		%
p+0.00	13	E	0.1		%	1.4	E	0.1		%	1.4	E	0.1		%
p+1.00	42	E	0.1		%	14	E	0.1		%	21	E	0.1		%
p+2.00	35	E	0.1		%	45	E	0.1		%	42	E	0.1		%
p+3.00	3.3	E	0.1		%	15	E	0.1		%	9.8	E	0.1		%
p+4.00	0.2	E	0.1		%	3.5	E	0.1		%	3.4	E	0.1		%
p+5.00	1.4	E	0.1		%	4	E	0.1		%	4.2	E	0.1		%

METRO Environmental Lab Analytical Report

PROJECT: A44703

	Locator:	Sampled:	Lab ID:	Matrix:	% Solids:
	P53VG1	Jul 29, 94	L4298-1	SALTWTRSED	80.7
	P53VG3	Jul 28, 94	L4298-2	SALTWTRSED	61.7
	P53VG5	Jul 29, 94	L4298-3	SALTWTRSED	62.5

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
p+6.00		<MDL,E	0.1		%	2.8	E	0.1		%	3.5	E	0.1		%
p+7.00		<MDL,E	0.1		%	3.3	E	0.1		%	4.8	E	0.1		%
p+8.00	0.5	E	0.1		%	3.7	E	0.1		%	4.2	E	0.1		%
p+9.00	0.1	E	0.1		%	1.1	E	0.1		%	1.1	E	0.1		%
p+10.0		<MDL,E	0.1		%	0.4	E	0.1		%	0.4	E	0.1		%
p+11.0	0.6	E	0.1		%	3.8	E	0.1		%	3.9	E	0.1		%

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator: P53VG6
Sampled: Jul 29, 94
Lab ID: L4298-4
Matrix: SALT/WTRSED
% Solids: 55.5

Parameters	Value	Qual	MDL	RDL	Units
		- Dry Weight Basis			
ORGANICS					
M.Code=SW-846 8080					
4,4-DDD	4.3	<RDL	2.3	4.81	ug/Kg
4,4-DDE	2.5	<RDL	2.3	4.81	ug/Kg
4,4-DDT		<MDL	2.3	4.81	ug/Kg
Aldrin		<MDL	2.3	4.81	ug/Kg
Alpha-BHC		<MDL	2.3	4.81	ug/Kg
Arocior 1016		<MDL	23	48.1	ug/Kg
Arocior 1221		<MDL	23	48.1	ug/Kg
Arocior 1232		<MDL	23	48.1	ug/Kg
Arocior 1242		<MDL	23	48.1	ug/Kg
Arocior 1248		<MDL	23	48.1	ug/Kg
Arocior 1254	40	<RDL	23	48.1	ug/Kg
Arocior 1260	49.7	L	23	48.1	ug/Kg
Beta-BHC		<MDL	2.3	4.81	ug/Kg
Chlordane		<MDL	14	24	ug/Kg
Delta-BHC		<MDL	2.3	4.81	ug/Kg
Dieldrin		<MDL	2.3	4.81	ug/Kg
Endosulfan I		<MDL	2.3	4.81	ug/Kg
Endosulfan II		<MDL	2.3	4.81	ug/Kg
Endosulfan Sulfate		<MDL	2.3	4.81	ug/Kg
Endrin		<MDL	2.3	4.81	ug/Kg
Endrin Aldehyde		<MDL	2.3	4.81	ug/Kg
Gamma-BHC (Lindane)		<MDL	2.3	4.81	ug/Kg
Heptachlor		<MDL	2.3	4.81	ug/Kg
Heptachlor Epoxide		<MDL	2.3	4.81	ug/Kg
Methoxychlor		<MDL	14	24	ug/Kg
Toxaphene		<MDL	23	48.1	ug/Kg
M.Code=SW-846 8260					
1,1,1-Trichloroethane		<MDL	9	18	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL,B	9	18	ug/Kg
1,1,2-Trichloroethane		<MDL	9	18	ug/Kg
1,1,2-Trichloroethylene		<MDL	9	18	ug/Kg
1,1-Dichloroethane		<MDL	9	18	ug/Kg
1,1-Dichloroethylene		<MDL	9	18	ug/Kg
1,2-Dichloroethane		<MDL	9	18	ug/Kg
1,2-Dichloropropane		<MDL	9	18	ug/Kg
2-Butanone (MEK)	58	<RDL,L	45	90.1	ug/Kg
2-Chloroethylvinyl ether		<MDL	9	18	ug/Kg
2-Hexanone		<MDL	45	90.1	ug/Kg
4-Methyl-2-Pentanone (MIBK)		<MDL	45	90.1	ug/Kg
Acetone	254	B,L	45	90.1	ug/Kg
Acrolein		<MDL,X	45	90.1	ug/Kg
Acrylonitrile		<MDL	45	90.1	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator: P53VG6
Sampled: Jul 29, 94
Lab ID: L4298-4
Matrix: SAL WTRSED
% Solids: 55.5

Parameters	Value	Qual	MDL	RDL	Units
		- Dry Weight Basis			
Benzene		<MDL	9	18	ug/Kg
Bromodichloromethane		<MDL	9	18	ug/Kg
Bromoform		<MDL	9	18	ug/Kg
Bromomethane		<MDL	9	18	ug/Kg
Carbon Disulfide	9.7	<RDL	9	18	ug/Kg
Carbon Tetrachloride		<MDL	9	18	ug/Kg
Chlorobenzene		<MDL	9	18	ug/Kg
Chlorodibromomethane		<MDL	9	18	ug/Kg
Chloroethane		<MDL	9	18	ug/Kg
Chloroform	35.5	B	9	18	ug/Kg
Chloromethane		<MDL	9	18	ug/Kg
Chloromethane		<MDL	9	18	ug/Kg
cis-1,3-Dichloropropene		<MDL	9	18	ug/Kg
Ethylbenzene		<MDL	9	18	ug/Kg
Methylene Chloride	88	<RDL,B	45	90.1	ug/Kg
Styrene		<MDL	9	18	ug/Kg
Tetrachloroethylene		<MDL	9	18	ug/Kg
Toluene		<MDL	9	18	ug/Kg
Total Xylenes		<MDL	9	18	ug/Kg
Trans-1,2-Dichloroethylene		<MDL	9	18	ug/Kg
Trans-1,3-Dichloropropene		<MDL	9	18	ug/Kg
Trichlorofluoromethane		<MDL	9	18	ug/Kg
Vinyl Acetate		<MDL,G	45	90.1	ug/Kg
Vinyl Chloride		<MDL	9	18	ug/Kg
M.Code=SW-846 8270					
1,2,4-Trichlorobenzene		<MDL	29	48.1	ug/Kg
1,2-Dichlorobenzene		<MDL	29	48.1	ug/Kg
1,2-Diphenylhydrazine		<MDL,L	95	193	ug/Kg
1,3-Dichlorobenzene		<MDL	29	48.1	ug/Kg
1,4-Dichlorobenzene		<MDL	29	48.1	ug/Kg
2,4,5-Trichlorophenol		<MDL	200	384	ug/Kg
2,4,6-Trichlorophenol		<MDL,L	200	384	ug/Kg
2,4-Dichlorophenol		<MDL	49	96	ug/Kg
2,4-Dimethylphenol		<MDL	49	96	ug/Kg
2,4-Dinitrophenol		<MDL	95	193	ug/Kg
2,4-Dinitrotoluene		<MDL	20	384	ug/Kg
2,6-Dinitrotoluene		<MDL	20	384	ug/Kg
2-Chloronaphthalene		<MDL	29	481	ug/Kg
2-Chlorophenol		<MDL	95	193	ug/Kg
2-Methylnaphthalene		<MDL	77	144	ug/Kg
2-Methylphenol		<MDL	49	96	ug/Kg
2-Nitroaniline		<MDL	200	288	ug/Kg
2-Nitrophenol		<MDL	49	96	ug/Kg
3,3'-Dichlorobenzidine		<MDL,X	49	96	ug/Kg
3-Nitroaniline		<MDL	200	288	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator: P53VG6
Sampled: Jul 29, 94
Lab ID: L4298-4
Matrix: SALTWTRSED
% Solids: 55.5

Parameters	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis		
4,6-Dinitro-O-Cresol		<MDL	95	193	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	20	28.8	ug/Kg
4-Chloro-3-Methylphenol		<MDL	95	193	ug/Kg
4-Chloroaniline		<MDL,G	95	193	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	29	48.1	ug/Kg
4-Methylphenol		<MDL	49	96	ug/Kg
4-Nitroaniline		<MDL,G	200	288	ug/Kg
4-Nitrophenol		<MDL,L	95	193	ug/Kg
Acenaphthene	153		20	38.4	ug/Kg
Acenaphthylene	129		29	48.1	ug/Kg
Aniline		<MDL,X	95	193	ug/Kg
Anthracene	791		29	48.1	ug/Kg
Benzidine		<MDL,X	1200	2310	ug/Kg
Benzo(a)anthracene	2320		29	48.1	ug/Kg
Benzo(a)pyrene	1510		49	96	ug/Kg
Benzo(b)fluoranthene	2450		77	144	ug/Kg
Benzo(g,h,i)perylene	330	G	49	96	ug/Kg
Benzo(k)fluoranthene	915		77	144	ug/Kg
Benzoic Acid	308		200	288	ug/Kg
Benzyl Alcohol		<MDL	49	96	ug/Kg
Benzyl Butyl Phthalate		<MDL	29	48.1	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL	49	96	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL	29	48.1	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL	95	193	ug/Kg
Bis(2-Ethylhexyl)Phthalate	541	B	29	48.1	ug/Kg
Carbazole	308	L	49	96	ug/Kg
Chrysene	2410		29	48.1	ug/Kg
Coprostanol	759		200	288	ug/Kg
Di-N-Butyl Phthalate	162	B	49	96	ug/Kg
Di-N-Octyl Phthalate		<MDL	29	48.1	ug/Kg
Dibenzo(a,h)anthracene	140	<RDL	77	144	ug/Kg
Dibenzofuran	152		49	96	ug/Kg
Diethyl Phthalate		<MDL	49	96	ug/Kg
Dimethyl Phthalate		<MDL	20	28.8	ug/Kg
Fluoranthene	4810		29	57.7	ug/Kg
Fluorene	285		29	48.1	ug/Kg
Hexachlorobenzene		<MDL	29	48.1	ug/Kg
Hexachlorobutadiene		<MDL	49	96	ug/Kg
Hexachlorocyclopentadiene		<MDL,X	49	96	ug/Kg
Hexachloroethane		<MDL,G	49	96	ug/Kg
Indeno(1,2,3-Cd)Pyrene	533		49	96	ug/Kg
Isophorone		<MDL	49	96	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL	49	96	ug/Kg
N-Nitrosodimethylamine		<MDL	200	288	ug/Kg
N-Nitrosodiphenylamine	49	<RDL	49	96	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator: P53VG6
Sampled: Jul 29, 94
Lab ID: L4258-4
Matrix: SALTWTRSED
% Solids: 55.5

Parameters	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis		
Naphthalene	240		77	144	ug/Kg
Nitrobenzene		<MDL	49	95	ug/Kg
Pentachlorophenol		<MDL	49	95	ug/Kg
Phenanthrene	1050		29	48.1	ug/Kg
Phenol		<MDL	200	283	ug/Kg
Pyrene	2900		29	48.1	ug/Kg
METALS					
M.Code=METRO 16:01-005					
Mercury, Total, CVAA	0.42		0.036	0.359	mg/Kg
M.Code=METRO 16:02-004					
Aluminum, Total, ICP	15200		18	89.2	mg/Kg
Antimony, Total, ICP		<MDL,G	5.4	26.7	mg/Kg
Arsenic, Total, ICP	16	<RDL	8.8	44.5	mg/Kg
Barium, Total, ICP	66.3	E	0.18	0.892	mg/Kg
Beryllium, Total, ICP	0.36	<RDL	0.18	0.892	mg/Kg
Cadmium, Total, ICP	0.61	<RDL	0.54	2.67	mg/Kg
Calcium, Total, ICP	5100		8.8	44.5	mg/Kg
Chromium, Total, ICP	26.7		0.88	4.45	mg/Kg
Copper, Total, ICP	46.8		0.72	3.57	mg/Kg
Iron, Total, ICP	25000		8.8	44.5	mg/Kg
Lead, Total, ICP	49.7		5.4	26.7	mg/Kg
Magnesium, Total, ICP	6250	E	5.4	26.7	mg/Kg
Manganese, Total, ICP	240	L	0.36	1.78	mg/Kg
Molybdenum, Total, ICP		<MDL	3.6	17.8	mg/Kg
Nickel, Total, ICP	21.4		3.6	17.8	mg/Kg
Selenium, Total, ICP		<MDL	8.8	44.5	mg/Kg
Silver, Total, ICP	0.77	<RDL	0.72	3.57	mg/Kg
Sodium, Total, ICP	9260		88	445	mg/Kg
Thallium, Total, ICP		<MDL	36	178	mg/Kg
Zinc, Total, ICP	97.7		0.88	4.45	mg/Kg
CONVENTIONALS					
M.Code=SM5310-B					
Total Organic Carbon	19100		9	18	mg/Kg
M.Code=(No Method Code)					
p-2.25	1.1	E	0.1		%
p-2.00		<NDL,E	0.1		%
p-1.00	0.5	E	0.1		%
p+0.00	1.6	E	0.1		%
p+1.00	11	E	0.1		%
p+2.00	30	E	0.1		%
p+3.00	16	E	0.1		%
p+4.00	5.8	E	0.1		%
p+5.00	7.9	E	0.1		%

METRO Environmental Lab Analytical Report

FROJECT: A44703

Locator: P53VG6
Sampled: Jul 29, 94
Lab ID: L4298-4
Matrix: SALTWTRSED
% Solids: 55.5

Parameters	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis		
p+6.00	7	E	0.1		%
p+7.00	7.8	E	0.1		%
p+8.00	4.3	E	0.1		%
p+9.00	1.1	E	0.1		%
p+10.0	0.4	E	0.1		%
p+11.0	5.1	E	0.1		%

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator:	P53VG8	P53VG10	P53VG11
Sampled:	Jul 29, 94	Jul 29, 94	Jul 29, 94
Lab ID:	L4298-5	L4298-6	L4298-7
Matrix:	SALTWTRSED	SALTWTRSED	SALTWTRSED
% Solids:	81.1	61.9	66.1

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
ORGANICS															
M.Code=SW-8468080															
4,4'-DDD		<MDL	1.6	3.29	ug/Kg	5.01		2.1	4.31	ug/Kg	34.8		2	4.04	ug/Kg
4,4'-DDE		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg	9.82		2	4.04	ug/Kg
4,4'-DDT		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Aldrin		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Alpha-BHC		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Aroclor 1016		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg		<MDL	20	40.4	ug/Kg
Aroclor 1221		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg		<MDL	20	40.4	ug/Kg
Aroclor 1232		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg		<MDL	20	40.4	ug/Kg
Aroclor 1242		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg		<MDL	20	40.4	ug/Kg
Aroclor 1248		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg	27	<RDL	20	40.4	ug/Kg
Aroclor 1254		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg	60.7		20	40.4	ug/Kg
Aroclor 1260		<MDL,L	16	32.9	ug/Kg		<MDL,L	21	43.1	ug/Kg	64.4	L	20	40.4	ug/Kg
Beta-BHC		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Chlordane		<MDL	9.9	16.4	ug/Kg		<MDL	13	21.5	ug/Kg		<MDL	12	20.1	ug/Kg
Delta-BHC		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Dieldrin		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Endosulfan I		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Endosulfan II		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Endosulfan Sulfate		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Endrin		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Endrin Aldehyde		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Gamma-BHC (Lindane)		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Heptachlor		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Heptachlor Epoxide		<MDL	1.6	3.29	ug/Kg		<MDL	2.1	4.31	ug/Kg		<MDL	2	4.04	ug/Kg
Methoxychlor		<MDL	9.9	16.4	ug/Kg		<MDL	13	21.5	ug/Kg		<MDL	12	20.1	ug/Kg
Toxaphene		<MDL	16	32.9	ug/Kg		<MDL	21	43.1	ug/Kg		<MDL	20	40.4	ug/Kg
M.Code=SW-8468260															
1,1,1-Trichloroethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,1,2,2-Tetrachloroethane		<MDL,B	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL,B	7.6	15.1	ug/Kg
1,1,2-Trichloroethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,1,2-Trichloroethylene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,1-Dichloroethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,1-Dichloroethylene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,2-Dichloroethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
1,2-Dichloropropane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
2-Butanone (MEK)		<MDL,L	31	61.7	ug/Kg		<MDL,L	40	80.8	ug/Kg		<MDL,L	38	75.6	ug/Kg
2-Chloroethylvinyl ether		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
2-Hexanone		<MDL	31	61.7	ug/Kg		<MDL	40	80.8	ug/Kg		<MDL	38	75.6	ug/Kg
4-Methyl-2-Pentanone (MIBK)		<MDL	31	61.7	ug/Kg		<MDL	40	80.8	ug/Kg		<MDL	38	75.6	ug/Kg
Acetone	90.6	B,L	31	61.7	ug/Kg	174	B,L	40	80.8	ug/Kg	146	B,L	38	75.6	ug/Kg
Acrolein		<MDL,X	31	61.7	ug/Kg		<MDL,X	40	80.8	ug/Kg		<MDL,X	38	75.6	ug/Kg
Acrylonitrile		<MDL	31	61.7	ug/Kg		<MDL	40	80.8	ug/Kg		<MDL	38	75.6	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

	Locator:	P53VG8	Locator:	P53VG10	Locator:	P53VG11
	Sampled:	Jul 29, 94	Sampled:	Jul 29, 94	Sampled:	Jul 29, 94
	Lab ID:	L4298-5	Lab ID:	L4298-6	Lab ID:	L4298-7
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	81.1	% Solids:	61.9	% Solids:	66.1

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
Benzene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Bromodichloromethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Bromoform		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Bromomethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Carbon Disulfide		<MDL	6.2	12.3	ug/Kg	14	<RDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Carbon Tetrachloride		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Chlorobenzene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Chlorodibromomethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Chloroethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Chloroform	6.3	<RDL,B	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg	8.5	<RDL,B	7.6	15.1	ug/Kg
Chloromethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Chloromethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
cis-1,3-Dichloropropene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Ethylbenzene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Methylene Chloride	104	B	31	61.7	ug/Kg	824	B	40	80.8	ug/Kg	134	B	38	75.6	ug/Kg
Styrene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Tetrachloroethylene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Toluene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Total Xylenes		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Trans-1,2-Dichloroethylene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Trans-1,3-Dichloropropene		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Trichlorofluoromethane		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
Vinyl Acetate		<MDL,G	31	61.7	ug/Kg		<MDL,G	40	80.8	ug/Kg		<MDL,G	38	75.6	ug/Kg
Vinyl Chloride		<MDL	6.2	12.3	ug/Kg		<MDL	8.1	16.2	ug/Kg		<MDL	7.6	15.1	ug/Kg
M.Code=SW-846 8270															
1,2,4-Trichlorobenzene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
1,2-Dichlorobenzene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
1,2-Diphenylhydrazine		<MDL,L	65	132	ug/Kg		<MDL,L	86	173	ug/Kg		<MDL,L	80	162	ug/Kg
1,3-Dichlorobenzene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
1,4-Dichlorobenzene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
2,4,5-Trichlorophenol		<MDL	140	263	ug/Kg		<MDL	180	344	ug/Kg		<MDL	170	322	ug/Kg
2,4,6-Trichlorophenol		<MDL,L	140	263	ug/Kg		<MDL,L	180	344	ug/Kg		<MDL,L	170	322	ug/Kg
2,4-Dichlorophenol		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
2,4-Dimethylphenol		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg	59	<RDL	41	80.6	ug/Kg
2,4-Dinitrophenol		<MDL	65	132	ug/Kg		<MDL	86	173	ug/Kg		<MDL	80	162	ug/Kg
2,4-Dinitrotoluene		<MDL	14	26.3	ug/Kg		<MDL	18	34.4	ug/Kg		<MDL	17	32.2	ug/Kg
2,6-Dinitrotoluene		<MDL	14	26.3	ug/Kg		<MDL	18	34.4	ug/Kg		<MDL	17	32.2	ug/Kg
2-Chloronaphthalene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
2-Chlorophenol		<MDL	65	132	ug/Kg		<MDL	86	173	ug/Kg		<MDL	80	162	ug/Kg
2-Methylnaphthalene		<MDL	53	98.6	ug/Kg	170		69	129	ug/Kg	290		65	121	ug/Kg
2-Methylphenol		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
2-Nitroaniline		<MDL	140	197	ug/Kg		<MDL	180	258	ug/Kg		<MDL	170	242	ug/Kg
2-Nitrophenol		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
3,3'-Dichlorobenzidine		<MDL,X	33	65.7	ug/Kg		<MDL,X	44	86.1	ug/Kg		<MDL,X	41	80.6	ug/Kg
3-Nitroaniline		<MDL	140	197	ug/Kg		<MDL	180	258	ug/Kg		<MDL	170	242	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703																
	Locator:	P53VG8				Locator:	P53VG10				Locator:	P53VG11			
	Sampled:	Jul 29, 94				Sampled:	Jul 29, 94				Sampled:	Jul 29, 94			
	Lab ID:	L4298-5				Lab ID:	L4298-6				Lab ID:	L4298-7			
	Matrix:	SALTWTRSED				Matrix:	SALTWTRSED				Matrix:	SALTWTRSED			
	% Solids:	81.1				% Solids:	61.9				% Solids:	66.1			
Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
4,6-Dinitro-O-Cresol		<MDL	65	132	ug/Kg		<MDL	86	173	ug/Kg		<MDL	80	162	ug/Kg
4-Bromophenyl Phenyl Ether		<MDL	14	19.7	ug/Kg		<MDL	18	25.8	ug/Kg		<MDL	17	24.2	ug/Kg
4-Chloro-3-Methylphenol		<MDL	65	132	ug/Kg		<MDL	86	173	ug/Kg		<MDL	80	162	ug/Kg
4-Chloroaniline		<MDL,G	65	132	ug/Kg		<MDL,G	86	173	ug/Kg		<MDL,G	80	162	ug/Kg
4-Chlorophenyl Phenyl Ether		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
4-Methylphenol		<MDL	33	65.7	ug/Kg	97.4		44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
4-Nitroaniline		<MDL,G	140	197	ug/Kg		<MDL,G	180	258	ug/Kg		<MDL,G	170	242	ug/Kg
4-Nitrophenol		<MDL,L	65	132	ug/Kg		<MDL,L	86	173	ug/Kg		<MDL,L	80	162	ug/Kg
Acenaphthene		<MDL	14	26.3	ug/Kg	425		18	34.4	ug/Kg	5610		17	32.2	ug/Kg
Acenaphthylene		<MDL	20	32.9	ug/Kg	267		26	43.1	ug/Kg	327		24	40.4	ug/Kg
Aniline		<MDL,X	65	132	ug/Kg		<MDL,X	86	173	ug/Kg		<MDL,X	80	162	ug/Kg
Anthracene	52.7		20	32.9	ug/Kg	1070		26	43.1	ug/Kg	2250		24	40.4	ug/Kg
Benzidine		<MDL,X	790	1580	ug/Kg		<MDL,X	1000	2070	ug/Kg		<MDL,X	970	1940	ug/Kg
Benzo(a)anthracene	91.4		20	32.9	ug/Kg	2700		26	43.1	ug/Kg	6900		24	40.4	ug/Kg
Benzo(a)pyrene	66		33	65.7	ug/Kg	1760		44	86.1	ug/Kg	3000		41	80.6	ug/Kg
Benzo(b)fluoranthene	114		53	98.6	ug/Kg	3780		69	129	ug/Kg	6020		65	121	ug/Kg
Benzo(g,h,i)perylene		<MDL,G	33	65.7	ug/Kg	481	G	44	86.1	ug/Kg	526	G	41	80.6	ug/Kg
Benzo(k)fluoranthene		<MDL	53	98.6	ug/Kg	1600		69	129	ug/Kg	2010		65	121	ug/Kg
Benzoic Acid		<MDL	140	197	ug/Kg	363		180	258	ug/Kg	313		170	242	ug/Kg
Benzyl Alcohol		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
Benzyl Butyl Phthalate		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
Bis(2-Chloroethoxy)Methane		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
Bis(2-Chloroethyl)Ether		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
Bis(2-Chloroisopropyl)Ether		<MDL	65	132	ug/Kg		<MDL	86	173	ug/Kg		<MDL	80	162	ug/Kg
Bis(2-Ethylhexyl)Phthalate	49	B	20	32.9	ug/Kg		<MDL,B	26	43.1	ug/Kg	236	B	24	40.4	ug/Kg
Carbazole		<MDL,L	33	65.7	ug/Kg	743	L	44	86.1	ug/Kg	1770	L	41	80.6	ug/Kg
Chrysene	152		20	32.9	ug/Kg	3020		26	43.1	ug/Kg	5230		24	40.4	ug/Kg
Coprostanol		<MDL	140	197	ug/Kg		<MDL	180	258	ug/Kg		<MDL	170	242	ug/Kg
Di-N-Butyl Phthalate	87.7	B	33	65.7	ug/Kg	131	B	44	86.1	ug/Kg	90.2	B	41	80.6	ug/Kg
Di-N-Octyl Phthalate		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
Dibenzo(a,h)anthracene		<MDL	53	98.6	ug/Kg	334		69	129	ug/Kg	245		65	121	ug/Kg
Dibenzofuran		<MDL	33	65.7	ug/Kg	333		44	86.1	ug/Kg	1600		41	80.6	ug/Kg
Diethyl Phthalate		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
Dimethyl Phthalate		<MDL	14	19.7	ug/Kg		<MDL	18	25.8	ug/Kg		<MDL	17	24.2	ug/Kg
Fluoranthene	208		20	39.5	ug/Kg	4750		26	51.7	ug/Kg	23600		24	48.4	ug/Kg
Fluorene		<MDL	20	32.9	ug/Kg	512		26	43.1	ug/Kg	1980		24	40.4	ug/Kg
Hexachlorobenzene		<MDL	20	32.9	ug/Kg		<MDL	26	43.1	ug/Kg		<MDL	24	40.4	ug/Kg
Hexachlorobutadiene		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
Hexachlorocyclopentadiene		<MDL,X	33	65.7	ug/Kg		<MDL,X	44	86.1	ug/Kg		<MDL,X	41	80.6	ug/Kg
Hexachloroethane		<MDL,G	33	65.7	ug/Kg		<MDL,G	44	86.1	ug/Kg		<MDL,G	41	80.6	ug/Kg
Indeno(1,2,3-Cd)Pyrene	43	<MDL	33	65.7	ug/Kg	761		44	86.1	ug/Kg	809		41	80.6	ug/Kg
Isophorone		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
N-Nitrosodi-N-Propylamine		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg
N-Nitrosodimethylamine		<MDL	140	197	ug/Kg		<MDL	180	258	ug/Kg		<MDL	170	242	ug/Kg
N-Nitrosodiphenylamine		<MDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg		<MDL	41	80.6	ug/Kg

METRO Environmental Lab Analytical Report

PROJECT: A44703

Locator:	P53VG8	Locator:	P53VG10
Sampled:	Jul 29, 94	Sampled:	Jul 29, 94
Lab ID:	L4298-5	Lab ID:	L4298-6
Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
% Solids:	81.1	% Solids:	61.9

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis		
Naphthalene		<NDL	53	98.6	ug/Kg	187		69	129	ug/Kg
Nitrobenzene		<NDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg
Pentachlorophenol		<NDL	33	65.7	ug/Kg		<MDL	44	86.1	ug/Kg
Phenanthrene	78.1		20	32.9	ug/Kg	2460		26	43.1	ug/Kg
Phenol		<NDL	140	197	ug/Kg		<MDL	180	258	ug/Kg
Pyrene	97.4		20	32.9	ug/Kg	11600		26	43.1	ug/Kg
METALS										
M.Code=METRO 16-01-005										
Mercury, Total, CVAA	0.031	<RDL	0.025	0.248	mg/Kg	1.66		0.032	0.318	mg/Kg
M.Code=METRO 16-02-004										
Aluminum, Total, ICP	10700		12	60.9	mg/Kg	12600		16	80.3	mg/Kg
Antimony, Total, ICP		<MDL,G	3.7	18.2	mg/Kg		<MDL,G	4.8	24.1	mg/Kg
Arsenic, Total, ICP	11	<RDL	6	30.5	mg/Kg	15	<RDL	8.1	40.1	mg/Kg
Barium, Total, ICP	20.6	E	0.12	0.609	mg/Kg	620	E	0.16	0.803	mg/Kg
Beryllium, Total, ICP	0.22	<RDL	0.12	0.609	mg/Kg	0.34	<RDL	0.16	0.803	mg/Kg
Cadmium, Total, ICP		<MDL	0.37	1.82	mg/Kg	1.5	<RDL	0.48	2.41	mg/Kg
Calcium, Total, ICP	4560		6	30.5	mg/Kg	7770		8.1	40.1	mg/Kg
Chromium, Total, ICP	19.6		0.6	3.05	mg/Kg	60.9		0.81	4.01	mg/Kg
Copper, Total, ICP	18.2		0.49	2.44	mg/Kg	111		0.65	3.21	mg/Kg
Iron, Total, ICP	14200		6	30.5	mg/Kg	19900		8.1	40.1	mg/Kg
Lead, Total, ICP	5.9	<RDL	3.7	18.2	mg/Kg	394		4.8	24.1	mg/Kg
Magnesium, Total, ICP	4280	E	3.7	18.2	mg/Kg	6560	E	4.8	24.1	mg/Kg
Manganese, Total, ICP	173	L	0.25	1.22	mg/Kg	221	L	0.32	1.6	mg/Kg
Molybdenum, Total, ICP		<MDL	2.5	12.2	mg/Kg	6.5	<RDL	3.2	16	mg/Kg
Nickel, Total, ICP	19.1		2.5	12.2	mg/Kg	36.8		3.2	16	mg/Kg
Selenium, Total, ICP		<MDL	6	30.5	mg/Kg		<MDL	8.1	40.1	mg/Kg
Silver, Total, ICP		<MDL	0.49	2.44	mg/Kg	5.19		0.65	3.21	mg/Kg
Sodium, Total, ICP	3880		60	305	mg/Kg	8510		81	401	mg/Kg
Thallium, Total, ICP		<MDL	25	122	mg/Kg		<MDL	32	160	mg/Kg
Zinc, Total, ICP	30.6		0.6	3.05	mg/Kg	208		0.81	4.01	mg/Kg
CONVENTIONALS										
M.Code=SM5310-B										
Total Organic Carbon	4020		6.2	12.3	mg/Kg	41500		8.1	16.2	mg/Kg
M.Code=(No Method Code)										
p-2.25	15	E	0.1		%	27	E	0.1		%
p-2.00	3.6	E	0.1		%	4.2	E	0.1		%
p-1.00	11	E	0.1		%	17	E	0.1		%
p+0.00	9.6	E	0.1		%	8	E	0.1		%
p+1.00	13	E	0.1		%	7.5	E	0.1		%
p+2.00	15	E	0.1		%	7.2	E	0.1		%
p+3.00	4.4	E	0.1		%	5.9	E	0.1		%
p+4.00	1.6	E	0.1		%	4.7	E	0.1		%
p+5.00	5.6	E	0.1		%	1.3	E	0.1		%

Locator:	P53VG11		
Sampled:	Jul 29, 94		
Lab ID:	L4298-7		
Matrix:	SALTWTRSED		
% Solids:	66.1		

Value	Qual	MDL	RDL	Units
		- Dry Weight Basis		
2130		65	121	ug/Kg
	<MDL	41	80.6	ug/Kg
	<MDL	41	80.6	ug/Kg
9590		24	40.4	ug/Kg
	<MDL	170	242	ug/Kg
29300		24	40.4	ug/Kg
0.935		0.03	0.303	mg/Kg
11600		15	75.2	mg/Kg
	<MDL,G	4.5	22.5	mg/Kg
17	<RDL	7.6	37.7	mg/Kg
72.5	E	0.15	0.752	mg/Kg
0.27	<RDL	0.15	0.752	mg/Kg
1.3	<RDL	0.45	2.25	mg/Kg
31000		7.6	37.7	mg/Kg
37.5		0.76	3.77	mg/Kg
55.7		0.61	3.01	mg/Kg
18500		7.6	37.7	mg/Kg
121		4.5	22.5	mg/Kg
6200	E	4.5	22.5	mg/Kg
228	L	0.3	1.5	mg/Kg
3.6	<RDL	3	15	mg/Kg
36.5		3	15	mg/Kg
	<MDL	7.6	37.7	mg/Kg
3.49		0.61	3.01	mg/Kg
5850		76	377	mg/Kg
	<MDL	30	150	mg/Kg
132		0.76	3.77	mg/Kg
16500		7.6	15.1	mg/Kg
1.9	E	0.1		%
0.3	E	0.1		%
3.9	E	0.1		%
5.8	E	0.1		%
26	E	0.1		%
31	E	0.1		%
9.7	E	0.1		%
2.5	E	0.1		%
5.5	E	0.1		%

METRO Environmental Lab Analytical Report

PROJECT: A44703

	Locator:	P53VG8	Locator:	P53VG10	Locator:	P53VG11
	Sampled:	Jul 29, 94	Sampled:	Jul 29, 94	Sampled:	Jul 29, 94
	Lab ID:	L4298-5	Lab ID:	L4298-6	Lab ID:	L4298-7
	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED	Matrix:	SALTWTRSED
	% Solids:	81.1	% Solids:	61.9	% Solids:	66.1

Parameters	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units	Value	Qual	MDL	RDL	Units
			- Dry Weight Basis					- Dry Weight Basis					- Dry Weight Basis		
p+6.00	5.3	E	0.1		%	4.1	E	0.1		%	4.2	E	0.1		%
p+7.00	6	E	0.1		%	3.9	E	0.1		%	3.3	E	0.1		%
p+8.00	3.7	E	0.1		%	3.3	E	0.1		%	2.4	E	0.1		%
p+9.00	1.4	E	0.1		%	1.1	E	0.1		%	0.4	E	0.1		%
p+10.0	0.6	E	0.1		%	0.4	E	0.1		%		<MDL,E	0.1		%
p+11.0	4.8	E	0.1		%	3.9	E	0.1		%	3.6	E	0.1		%

APPENDIX E
BENTHIC TAXONOMY DATA

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Amage anops	5001670101		1			
Ampharete labrops	5001670215	9	1	5	5	1
Ampharete sp. Indet.	5001670200					
Ampharete cf. crassiseta						
Ampharetidae sp. Indet.	5001670000			1		
Amphicties mucronata	5001670306		1			
Anobothrus gracilis	5001670701					
Aphelochaeta monilaris	5001500301	2	1	1	3	
Aphelochaeta sp. Indet.						
Aphelochaeta sp. N-1		4	2		1	1
Aphrodita sp. Juv.	5001010100					
Aricidea ramosa	5001410706				2	
Aricidea wassi	5001410206					
Armandia brevis	5001580202					1
Ascleriocheilus beringainus	5001570201					
Barantolla nr. americana	5001600601					
Capitella capitata 'hyperspecies'	5001600101					
Capitellidae sp. Indet.	5001600000					
Caulleriella pacifica		4	3	2	2	1
Chaetozone acuta						
Chaetozone nr. setosa	5001500401	7	5	4	2	2
Chaetozone sp. Indet.	5001500400					
Cirratulidae sp. Indet.	5001500000	1	3	1	2	1
Cirratulidae sp. Juv.	5001500000					
Cirratulus robustus	5001500102					
'Clymenura' gracilis	5001631203	3				
Cossura pygodactyla	5001520106				2	
Demonax sp. Indet.	5001702800					
Diopatra ornata	5001290202		1	3		2
Dipolydora cardalia	5001430431				1	1
Dipolydora caulleryi	5001430404			1		
Dipolydora socialis	5001430402					
Dorvillea annulata	5001360502					
Dorvillea pseudorubrovittata	5001360101				1	
Dorvillidae sp. Indet.	5001360000					
Drilonereis longa	5001330103				1	
Ehlersia heterochaeta	5001232201			1		
Ehlersia hyperioni	5001230321	2	1			
Ehlersia sp. Indet.	5001232200					
Eteone sp. Indet.	5001130200					
Euchone incolor	5001700204	2				
Euclymeninae sp. Indet.		1	1	1		
Eulalia californiensis		2	1	1	6	1
Eumida longicornuta		1	4	1	1	5

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Exogone lourei	5001230703					
Exogone sp. Juv.	5001230700	1				
Gattyana ciliata	5001020602					
Gattyana cirrosa	5001020603	4	4	9	2	4
Glycera americana	5001270104	1				
Glycera nana		4	7	7	1	1
Glycera sp. Indet.	5001270100				1	
Glycera sp. Juv.	5001270100					
Glycinde armigera	5001280103	4	4	2	1	1
Glycinde polygnatha	5001280105					
Glycinde sp. Juv.	5001280100					
Goniada maculata	5001280202	2	2		1	1
Harmothoe imbricata	5001020806					
Hesionidae sp. Indet.	5001210000					
Heteromastus filobranchus	5001600203					
Isocirrus longiceps	5001632001					
Laonice cirrata	5001430201	2	6	2		1
Laonice pugettensis	5001430204					
Leitoscoloplos pugettensis	5001401601		2			
Levinsenia gracilis	5001410801	1		1	2	
Lumbrineridae sp. Indet.	5001310000	39	55	46	42	17
Lumbrineris californiensis	5001310132	4	7	9	23	11
Lumbrineris limicola	5001310128					
Magelona longicornis	5001440105	1		2		1
Maldanidae sp. Indet.	5001630000					
Mediomastus sp. Indet.	5001600400		2		1	
Mesochaetopterus taylori	5001490401		1			1
Microphthalmus sczelkowii	5001210201					1
Micropodarke dubia	5001210801		1			
Neosabellaria cementarium	5001650201		1			1
Nephtys caeca	5001250103			1		
Nephtys cornuta	5001250104	1	5	3	4	1
Nephtys ferruginea	5001250111	9	8	7	1	3
Nephtys nr. ciliata	5001250102					
Nephtys sp. Indet.	5001250100					1
Nephtys sp. Juv.	5001250100				1	
Nereidae sp. Indet.	5001240000					
Nereis procera	5001240404	2	2		1	2
Nereis sp. Juv.	5001240400					
Notomastus latericius	5001600306					
Notomastus sp. Indet.	5001600300					
Notomastus tenuis	5001600302	1	3	1	2	3
Odontosyllis phosphorea	5001231303	5		2		
Oligochaeta sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Onuphidae sp. Indet.	5001290000					
Onuphis elegans	5001290111					
Onuphis iridescens	5001290103					
Onuphis sp. Juv.	5001290100					
Ophelina acuminata	5001580607	1				
Orbiniidae sp. Indet.	5001400000					
Paleonotus bellis	5001080101					
Paranaitis polynoides	5001130803					
Parandalia fauveli	5001220802		2	1	1	4
Paraprionospio pinnata	5001431701	3	3		4	1
Parougia caeca						
Pectinaria californiensis	5001660304					
Pectinaria granulata	5001660303	5	1	1	2	1
Pectinaria sp. Indet.	5001660300					
Pholoe glabra	5001060102					
Pholoe minuta	5001060101					
Pholoides aspera	5001040202	9	2	6	8	8
Phyllochaetopterus prolifica	5001490202	1				
Phyllodoce groenlandica	5001130102	1	1	2		
Phyllodoce hartmanae	5001131402		1			
Phyllodoce sp. Indet.	5001131400					
Phyllodoce sp. Juv.	5001131400					
Phyllodocidae sp. Juv.	5001130000					
Phylo felix	5001400401					
Pilargis maculata	5001220303				2	
Pionosyllis sp. Indet.	5001230200					
Pista bansei						
Pista elongata	5001680703	1				
Pista sp. Indet.	5001680700				1	
Platynereis bicanaliculata	5001240501					
Podarkeopsis glabrus	5001211903	1			2	
Polycirrus californicus	5001680810	1				
Polycirrus sp. Indet.	5001680800					
Polycirrus sp. complex	.					
Polydora limicola	5001430415			1		
Polydora sp. Indet.	5001430400				1	
Polynoidae sp. Indet.	5001020000	1	3	1	4	
Prionospio jubata		83	58	59	51	61
Prionospio lighti	5001430521					
Prionospio multibranchiata	5001433601					
Prionospio sp. Indet.	5001430500					
Prionospio sp. Juv.	5001430500	1				
Proclea graffi	5001681702		1			
Protodorvillea gracilis	5001360201	1		1		

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Rhodine bitorquata	5001631001					
Scoletoma luti	5001310109	5	17	10	11	5
Scoloplos armiger	5001400301					
Sigalion spinosa						
Sphaerodoropsis sphaerulifer	5001260202	1	4	2	2	1
Sphaerosyllis californiensis	5001230808					
Sphaerosyllis ranunculus						
Sphaerosyllis sp. Indet.	5001230800					
Spio cirrifera	5001430703					
Spio sp. Indet.	5001430700					
Spiochaetopterus costarum	5001490302	27	46	30	9	18
Spionidae sp. Juv.	5001430000					
Spiophanes berkeleyorum	5001431004	6		1	1	1
Sthenalais fusca	5001060306	1		1		
Streblosoma bairdi	5001682502					
Syllidae sp. Indet.	5001230000					1
Syllis sp. Indet.	5001230300	1	1			
Tenonia priops	5001022302					
Terebellidae sp. Juv.	5001680000					
Terebellides californica	5001690103					
Terebellides sp. Indet.	5001690100					
Travisia forbesii	5001580402					1
Travisia sp. Juv.	5001580400					
Trochochaeta multisetosa	5001450203	1	1	1	2	
Typosyllis harti	5001230510	1	1	3	2	4
MOLLUSCA						
Acila castrensis	5502020101					
Adontorhina cyclia	5515020102				1	
Aeolidiidae sp. Indet.	5142030000					
Alvania compacta	5103200106		1			
Articulata sp. Juv.		1				
Astarte elliptica	5515190114					
Astyris gausapata		2	1			
Axinopsida serricata	5515020201	164	174	150	126	187
Balcis sp. Indet.	5103530600					
Bivalvia sp. Juv.	5500000000					
Cardiidae sp. Juv.	5515220000					
Cardiomya pectinata	5520100101		2			
Chaetoderma sp. Indet.	5402010100				2	
Clinocardium blandum						
Clinocardium nuttalli	5515220102					
Clinocardium sp. Juv.	5515220100					
Compsomyax subdiaphana	5515470301	1			1	

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Crepipatella lingulata	5103640301					
Cryptonatica affinis	5103760201					
Cylichna attonsa	5110040214					
Gastropoda sp. Indet.	5100000000					
Gastropteron pacificum	5110070101			1		
Hiatella arctica	5517060201					
Kurtzia arteaga	5106024101		1			
Lacuna vincta	5103090305					
Lirobittium sp. Indet.						
Lottia pelta						
Lottia sp. Juv.						
Lucinoma annulatum	5515010201					1
Lyonsia californica	5520050202	12	1	2		6
Macoma calcarea	5515310101				1	
Macoma carlottensis	5515310112	1	8		1	7
Macoma elimata	5515310102	7	3	4	4	1
Macoma inquinata	5515310115					
Macoma obliqua	5515310106	2				1
Macoma sp. Juv.	5515310100	20	7	3	4	7
Macoma yoldiformis	5515310111		1			
Margarites pupillus	5102100308					
Megacrenella columbiana	5507010301	6	4	2	1	4
Melanochlamys diomedea	5110060101					
Modiolus sp. Juv.	5507010600					1
Mysella tumida	5515100102					
Mytilidae sp. Juv.	5507010000					
Mytilus edulis sp. complex	5507010100					
Nassarius mendicus	5101080101					
Nemocardium centrifilosum	5515220301	1		2		1
Nucula tenuis	5502020201		1		2	1
Nuculana minuta	5502040202					
Nudibranchia sp. Juv.	5127000000	1		1	1	
Odostomia sp. Indet.	5108010100					
Olivella baetica	5105100102					
Onchidoris bilamellata	5131050507					
Pandora filosa	5520020102	1				
Pandora sp. Juv.	5520020100	2	1			
Panomya ampla	5517060303					
Parvilucina tenuisculpta	5515010101	13	28	37	24	43
Pododesmus macroschisma	5509090101					
Protothaca staminea	5515470701					
Psephidia lordi	5515470501	3	2	1		
Rictaxis punctocaelatus	5110010401					
Saxidomus giganteus	5515470201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Solen sicarius	5515290201					
Tellina modesta	5515310204					
Tellina nuculoides	5515310202					
Teredinidae sp. Indet.	5518020000					
Thracia cf. challisiana	5520080207					
Thracia sp. Juv.	5520080200					
Thracia trapezoides	5520080203					
Thyasira gouldi	5515020325		2	1	2	2
Turbonilla sp. Indet.	5108010200	1	2			
CRUSTACEA						
Ampelisca careyi	6169020135					
Ampelisca cristata	6169020112					
Ampelisca hancocki	6169020113					
Ampelisca lobata	6169020134					1
Aoroides exilis	6169060106					
Aoroides inermis	6169060104		1			1
Aoroides intermedia	6169060107					
Aruga oculata						
Balanomorpha sp. Indet.	6134000000					
Balanus glandula	6134020107					
Bopyroides hippolytes	6165040401		2			
Brachyura sp. Indet.	6184000000					
Byblis millsi	6169020209	9	2	3	1	
Byblis sp. Indet.	6169020200					
Cancer gracilis	6188030105	3	2			2
Cancer productus	6188030101					
Caprella laeviuscula	6171010710					
Caprella mendax	6171010719					
Chthamalus dalli	6134010101					
Corophium crassicorne	6169150203					
Crangon alaskensis	6179221003	2	1			1
Crangon sp. Indet.	6179220100					
Crangonidae sp. Indet.	6179220000					
Cyclopoida sp. Indet.	6120000000					1
Deflexilodes aenigmaticus		2		1	1	2
Desdimelita californica	6169211005					
Diastylis santamariensis						
Eobrolgus chumashi	6169421902					
Euaulus pusiolus	6179160408					
Eudorella pacifica	6154040202	7	3	3	3	3
Euphilomedes carcharodonta	6111070301	332	143	194	114	221
Euphilomedes producta	6111070303	7	5	8	5	11
Exosphaeroma inornata	6161020402					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
Gammaridea sp. Indet.	6169210000		1			
Gammaropsis thompsoni	6169260401					
Haliophasma geminatum	6160011601					
Harpacticoida sp. Indet.	6119000000					
Hemigrapsus oregonensis	6189070102					
Heterophoxus conlanae			1	3	4	4
Hippolytidae sp. Indet.	6179160000					
Hippomedon coecus	6169341411		1			3
Leptochelia dubia	6157020103			2		
Leptognathia gracilis	6157090102					
Mayerella banksia	6171010301					
Melphisana "bola"	6169350201					
Munnogonium tillerae	6163120303					
Mysidae sp. Indet.	6153010000					
Nebalia "pugettensis"	6145010102					
Neotrypaea sp. Indet.				1		
Nymphon pixellae	6001010107		1			
Opisa tridentata	6169342802					
Orchomene pacificus	6169342903					
Orchomene pinguis	6169342904					
Pachynus barnardi	6169343101					
Pagurus dalli	6183060223	1				
Pagurus granosimanus	6183060211					
Pagurus sp. Indet.	6183060200					
Parametaphoxus quaylei			1	2	5	8
Parasterope barnesi	6111030503	1	5	2	1	4
Peramphithoe tea						
Photis brevipes	6169260201					
Phoxichelidium femoratum	6001060102					1
Pinnixa schmitti	6189060404			3		
Pinnixa sp. Indet.	6189060400					1
Pinnotheridae sp. Indet.	6189060000					
Pleusymtes sp A						
Protomedeia prudens	6169260312					
Protomedeia sp. Indet.	6169260300					
Rhepoxynius abronius	6169421504					
Rutiderma lomae	6111060103				1	
Solidobalanus hesperius	6134050201	1				
Spirontocaris snyderi	6179160204		1			
Spirontocaris sp. Indet.	6179160200	1				
Synchelidium pectinatum				1	1	
Synchelidium rectipalmum	6169371403					
Synchelidium variabilum						
Westwoodilla caecula	6169371502		2	4	1	2

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG1-1	VG1-2	VG1-3	VG1-4	VG1-5
MISCELLANEOUS						
Amphiodia periercta	8129030107					
Amphiodia sp. Indet.	8129030100					
Amphipholis sp. Indet.	8129030900					1
Amphipholis squamata	8129030202					
Amphiuridae sp. Indet.	8129030000					
Anthozoa sp. Indet.	3740000000					
Chironomidae sp. Juv.	6505080000					
Crossaster papposus	8113010103					
Cucumaria piperata	8172060111					
Ephemeroptera sp. Juv.						
Golfingia sp. Indet.	7200020100	4	5	3	5	5
Golfingia sp. Juv.	7200020100					
Holothuroidea sp. Indet.	8170000000	1				
Nematoda sp. Indet.	4700000000					
Nemertinea sp. Indet.	4300000000	3	5	4	7	1
Nynantheae sp. Indet.		1		1	2	1
Ophiura lutkeni	8127010607			1	2	
Ophiura sarsi	8127010610					
Ophiura sp. Indet.	8127010600			1		
Pentamera sp. Indet.	8172060300					
Phoronis sp. Indet.	7700010200					
Platyhelminthes sp. Indet.	3900000000				1	
Spinulosida sp. Indet.	8112000000			1		1
Strongylocentrotus sp. Juv.	8149030200					
Tunicate sp. Indet.				1		

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Amage anops	5001670101					
Ampharete labrops	5001670215					
Ampharete sp. Indet.	5001670200					
Ampharete cf. crassiseta						
Ampharetidae sp. Indet.	5001670000	2			1	
Amphicties mucronata	5001670306					
Anobothrus gracilis	5001670701	8	2	1	1	
Aphelochaeta monilaris	5001500301		2		1	1
Aphelochaeta sp. Indet.		2	2	1	1	2
Aphelochaeta sp. N-1			3			2
Aphrodita sp. Juv.	5001010100					
Aricidea ramosa	5001410706					
Aricidea wassi	5001410206					
Armandia brevis	5001580202					1
Ascleriocheilus beringainus	5001570201					
Barantolla nr. americana	5001600601					
Capitella capitata 'hyperspecies'	5001600101					
Capitellidae sp. Indet.	5001600000					
Caulleriella pacifica						
Chaetozone acuta						
Chaetozone nr. setosa	5001500401	5	1	2	4	6
Chaetozone sp. Indet.	5001500400					
Cirratulidae sp. Indet.	5001500000					
Cirratulidae sp. Juv.	5001500000	1	1			
Cirratulus robustus	5001500102					
'Clymenura' gracilis	5001631203	1		2		
Cossura pygodactyla	5001520106		1			3
Demonax sp. Indet.	5001702800					
Diopatra ornata	5001290202	4	2	1	4	1
Dipolydora cardalia	5001430431					
Dipolydora caulleryi	5001430404					
Dipolydora socialis	5001430402					
Dorvillea annulata	5001360502					
Dorvillea pseudorubrovittata	5001360101					
Dorvillidae sp. Indet.	5001360000		1			
Drilonereis longa	5001330103					1
Ehlersia heterochaeta	5001232201	1	4			
Ehlersia hyperioni	5001230321	1	4			
Ehlersia sp. Indet.	5001232200					
Eteone sp. Indet.	5001130200			1		
Euchone incolor	5001700204	1				
Euclymeninae sp. Indet.						
Eulalia californiensis			2			
Eumida longicornuta			3	1	1	2

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Exogone lourei	5001230703	1	1	1		
Exogone sp. Juv.	5001230700					
Gattyana ciliata	5001020602					
Gattyana cirrosa	5001020603				1	
Glycera americana	5001270104					
Glycera nana		1			2	1
Glycera sp. Indet.	5001270100		1			
Glycera sp. Juv.	5001270100					
Glycinde armigera	5001280103	1				
Glycinde polygnatha	5001280105					
Glycinde sp. Juv.	5001280100					
Goniada maculata	5001280202	1	1			1
Harmothoe imbricata	5001020806					
Hesionidae sp. Indet.	5001210000					
Heteromastus filobranchus	5001600203				1	
Isocirrus longiceps	5001632001					
Laonice cirrata	5001430201		2			
Laonice pugettensis	5001430204					
Leitoscoloplos pugettensis	5001401601			4		
Levinsenia gracilis	5001410801	2				4
Lumbrineridae sp. Indet.	5001310000	20	31	7	16	10
Lumbrineris californiensis	5001310132		1			2
Lumbrineris limicola	5001310128					
Magelona longicornis	5001440105					
Maldanidae sp. Indet.	5001630000	1		2	1	1
Mediomastus sp. Indet.	5001600400	1	1	1		
Mesochaetopterus taylori	5001490401					
Microphthalmus sczelkowii	5001210201					
Micropodarke dubia	5001210801					
Neosabellaria cementarium	5001650201					
Nephtys caeca	5001250103					
Nephtys cornuta	5001250104	6	9	1	6	11
Nephtys ferruginea	5001250111	4	2	3	6	5
Nephtys nr. ciliata	5001250102					
Nephtys sp. Indet.	5001250100					
Nephtys sp. Juv.	5001250100		1			
Nereidae sp. Indet.	5001240000					
Nereis procera	5001240404	2	1	2	1	
Nereis sp. Juv.	5001240400					1
Notomastus latericius	5001600306					
Notomastus sp. Indet.	5001600300					
Notomastus tenuis	5001600302	1	3	2	4	3
Odontosyllis phosphorea	5001231303					
Oligochaeta sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Onuphidae sp. Indet.	5001290000					
Onuphis elegans	5001290111					
Onuphis iridescens	5001290103					
Onuphis sp. Juv.	5001290100					
Ophelina acuminata	5001580607	1		1		2
Orbiniidae sp. Indet.	5001400000		1			
Paleonotus bellis	5001080101					1
Paranaitis polynoides	5001130803		1			
Parandalia fauveli	5001220802			1		1
Paraprionospio pinnata	5001431701	1	2	1	2	2
Parougia caeca						
Pectinaria californiensis	5001660304					
Pectinaria granulata	5001660303		1			
Pectinaria sp. Indet.	5001660300					
Pholoe glabra	5001060102					
Pholoe minuta	5001060101					
Pholoides aspera	5001040202					1
Phyllochaetopterus prolifica	5001490202					
Phyllodoce groenlandica	5001130102	2			1	1
Phyllodoce hartmanae	5001131402					
Phyllodoce sp. Indet.	5001131400	1	1			
Phyllodoce sp. Juv.	5001131400					
Phyllodocidae sp. Juv.	5001130000					
Phylo felix	5001400401					
Pilargis maculata	5001220303					
Pionosyllis sp. Indet.	5001230200					
Pista bansei						
Pista elongata	5001680703					
Pista sp. Indet.	5001680700					
Platynereis bicanaliculata	5001240501					
Podarkeopsis glabrus	5001211903					
Polycirrus californicus	5001680810				1	
Polycirrus sp. Indet.	5001680800					
Polycirrus sp. complex						
Polydora limicola	5001430415					1
Polydora sp. Indet.	5001430400					
Polynoidae sp. Indet.	5001020000		1			2
Prionospio jubata		34	35	19	34	43
Prionospio lighti	5001430521	1				
Prionospio multibranchiata	5001433601					
Prionospio sp. Indet.	5001430500					
Prionospio sp. Juv.	5001430500					
Proclea graffi	5001681702	1				
Protodorvillea gracilis	5001360201	2	2			

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Rhodine bitorquata	5001631001	1				
Scoletoma luti	5001310109	6	7	6	6	16
Scoloplos armiger	5001400301					
Sigalion spinosa						
Sphaerodoropsis sphaerulifer	5001260202	5	4	1	4	3
Sphaerosyllis californiensis	5001230808					
Sphaerosyllis ranunculus		2				
Sphaerosyllis sp. Indet.	5001230800					
Spio cirrifera	5001430703		1			
Spio sp. Indet.	5001430700					
Spiochaetopterus costarum	5001490302	7	20		4	10
Spionidae sp. Juv.	5001430000					
Spiophanes berkeleyorum	5001431004	1				3
Sthenalais fusca	5001060306	1				1
Streblosoma bairdi	5001682502	1				
Syllidae sp. Indet.	5001230000					
Syllis sp. Indet.	5001230300			1		
Tenonia priops	5001022302					
Terebellidae sp. Juv.	5001680000					
Terebellides californica	5001690103	1				
Terebellides sp. Indet.	5001690100					
Travisia forbesii	5001580402					
Travisia sp. Juv.	5001580400					
Trochochaeta multisetosa	5001450203	1	1			2
Typosyllis harti	5001230510	2	3	1	2	2
MOLLUSCA						
Acila castrensis	5502020101					
Adontorhina cyclia	5515020102	2				
Aeolidiidae sp. Indet.	5142030000					
Alvania compacta	5103200106					
Articulata sp. Juv.						
Astarte elliptica	5515190114					
Astyris gausapata			1	13	5	2
Axinopsida serricata	5515020201	335	127	201	191	176
Balcis sp. Indet.	5103530600					
Bivalvia sp. Juv.	5500000000	1	2			1
Cardiidae sp. Juv.	5515220000					
Cardiomya pectinata	5520100101					
Chaetoderma sp. Indet.	5402010100	1				2
Clinocardium blandum						
Clinocardium nuttalli	5515220102					
Clinocardium sp. Juv.	5515220100					
Compsomyax subdiaphana	5515470301				1	1

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Crepipatella lingulata	5103640301					
Cryptonatica affinis	5103760201					
Cylichna attonsa	5110040214					
Gastropoda sp. Indet.	5100000000					
Gastropteron pacificum	5110070101			1	1	5
Hiatella arctica	5517060201		1			
Kurtzia arteaga	5106024101					
Lacuna vincta	5103090305					
Lirobittium sp. Indet.						
Lottia pelta						
Lottia sp. Juv.						
Lucinoma annulatum	5515010201	2	2			1
Lyonsia californica	5520050202	4		1	1	2
Macoma calcarea	5515310101					
Macoma carlottensis	5515310112	8	2	18	11	6
Macoma elimata	5515310102			2		2
Macoma inquinata	5515310115					
Macoma obliqua	5515310106					
Macoma sp. Juv.	5515310100	22	14	14	2	4
Macoma yoldiformis	5515310111		1		1	
Margarites pupillus	5102100308					
Megacrenella columbiana	5507010301	5	5		3	1
Melanochlamys diomedea	5110060101					
Modiolus sp. Juv.	5507010600	1				
Mysella tumida	5515100102	1		3	1	1
Mytilidae sp. Juv.	5507010000					
Mytilus edulis sp. complex	5507010100					
Nassarius mendicus	5101080101					
Nemocardium centrifilosum	5515220301		1	1		1
Nucula tenuis	5502020201	1	4		1	
Nuculana minuta	5502040202					
Nudibranchia sp. Juv.	5127000000					
Odostomia sp. Indet.	5108010100					1
Olivella baetica	5105100102					
Onchidoris bilamellata	5131050507					
Pandora filosa	5520020102					
Pandora sp. Juv.	5520020100	1	1			
Panomya ampla	5517060303					
Parvilucina tenuisculpta	5515010101	38	23	23	25	23
Pododesmus macroschisma	5509090101					
Protothaca staminea	5515470701					
Psephidia lordi	5515470501					
Rictaxis punctocaelatus	5110010401					
Saxidomus giganteus	5515470201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Solen sicarius	5515290201					
Tellina modesta	5515310204					
Tellina nuculoides	5515310202					
Teredinidae sp. Indet.	5518020000					
Thracia cf. challisiana	5520080207					
Thracia sp. Juv.	5520080200					
Thracia trapezoides	5520080203					1
Thyasira gouldi	5515020325		1	1		3
Turbonilla sp. Indet.	5108010200					
CRUSTACEA						
Ampelisca careyi	6169020135					
Ampelisca cristata	6169020112					
Ampelisca hancocki	6169020113					1
Ampelisca lobata	6169020134					
Aoroides exilis	6169060106					
Aoroides inermis	6169060104	2				
Aoroides intermedia	6169060107					
Aruga oculata						
Balanomorpha sp. Indet.	6134000000					
Balanus glandula	6134020107					
Bopyroides hippolytes	6165040401					
Brachyura sp. Indet.	6184000000					
Byblis millsi	6169020209	1				
Byblis sp. Indet.	6169020200					
Cancer gracilis	6188030105			2	1	1
Cancer productus	6188030101					
Caprella laeviuscula	6171010710					
Caprella mendax	6171010719					
Chthamalus dalli	6134010101					
Corophium crassicorne	6169150203					
Crangon alaskensis	6179221003				3	1
Crangon sp. Indet.	6179220100					
Crangonidae sp. Indet.	6179220000					
Cyclopoida sp. Indet.	6120000000					
Deflexilodes aenigmaticus						1
Desdimelita californica	6169211005					
Diastylis santamariensis						
Eobrolgus chumashi	6169421902					
Euaulus pusiolus	6179160408					
Eudorella pacifica	6154040202	10	5	5	5	5
Euphilomedes carcharodonta	6111070301	76	75	64	72	50
Euphilomedes producta	6111070303	5	5		4	2
Exosphaeroma inornata	6161020402					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
Gammaridea sp. Indet.	6169210000					
Gammaropsis thompsoni	6169260401					
Haliophasma geminatum	6160011601					
Harpacticoida sp. Indet.	6119000000					
Hemigrapsus oregonensis	6189070102					
Heterophoxus conlanae		3		1	2	8
Hippolytidae sp. Indet.	6179160000					
Hippomedon coecus	6169341411				2	
Leptochelia dubia	6157020103		1	2		
Leptognathia gracilis	6157090102					
Mayerella banksia	6171010301					
Melphisana "bola"	6169350201					
Munnogonium tillerae	6163120303					
Mysidae sp. Indet.	6153010000		2			
Nebalia "pugettensis"	6145010102					
Neotrypaea sp. Indet.		2			1	
Nymphon pixellae	6001010107				1	
Opisa tridentata	6169342802					
Orchomene pacificus	6169342903					
Orchomene pinguis	6169342904					
Pachynus barnardi	6169343101					
Pagurus dalli	6183060223					
Pagurus granosimanus	6183060211					
Pagurus sp. Indet.	6183060200					
Parametaphoxus quaylei		4	3		2	1
Parasterope barnesi	6111030503	1			1	1
Peramphithoe tea						
Photis brevipes	6169260201					
Phoxichelidium femoratum	6001060102					
Pinnixa schmitti	6189060404					
Pinnixa sp. Indet.	6189060400		1	1		2
Pinnotheridae sp. Indet.	6189060000					
Pleusymtes sp A						
Protomedeia prudens	6169260312					
Protomedeia sp. Indet.	6169260300					
Rhepoxynius abronius	6169421504					
Rutiderma lomae	6111060103		1			
Solidobalanus hesperius	6134050201	1				2
Spirontocaris snyderi	6179160204					
Spirontocaris sp. Indet.	6179160200					
Synchelidium pectinatum						
Synchelidium rectipalmum	6169371403					
Synchelidium variabilum						
Westwoodilla caecula	6169371502					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG2-1	VG2-2	VG2-3	VG2-4	VG2-5
MISCELLANEOUS						
Amphiodia periercta	8129030107					
Amphiodia sp. Indet.	8129030100					
Amphipholis sp. Indet.	8129030900					
Amphipholis squamata	8129030202					
Amphiuridae sp. Indet.	8129030000					
Anthozoa sp. Indet.	3740000000					
Chironomidae sp. Juv.	6505080000					
Crossaster papposus	8113010103					
Cucumaria piperata	8172060111					
Ephemeroptera sp. Juv.			2			
Golfingia sp. Indet.	7200020100			3	3	
Golfingia sp. Juv.	7200020100					
Holothuroidea sp. Indet.	8170000000					
Nematoda sp. Indet.	4700000000					
Nemertinea sp. Indet.	4300000000	3	6		3	2
Nynantheae sp. Indet.		3	2			
Ophiura lutkeni	8127010607		5			
Ophiura sarsi	8127010610					
Ophiura sp. Indet.	8127010600					2
Pentamera sp. Indet.	8172060300					
Phoronis sp. Indet.	7700010200					
Platyhelminthes sp. Indet.	3900000000		1			
Spinulosida sp. Indet.	8112000000					
Strongylocentrotus sp. Juv.	8149030200					
Tunicate sp. Indet.					1	

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Amage anops	5001670101					
Ampharete labrops	5001670215	1	5	5	3	5
Ampharete sp. Indet.	5001670200					
Ampharete cf. crassiseta						
Ampharetidae sp. Indet.	5001670000					
Amphictles mucronata	5001670306					
Anobothrus gracilis	5001670701		1	1		
Aphelochaeta monilaris	5001500301		3	1	7	4
Aphelochaeta sp. Indet.				1	1	1
Aphelochaeta sp. N-1		1		5	13	1
Aphrodita sp. Juv.	5001010100					
Aricidea ramosa	5001410706					
Aricidea wassi	5001410206			1	1	
Armandia brevis	5001580202					
Ascleriocheilus beringainus	5001570201			1		
Barantolla nr. americana	5001600601		1			
Capitella capitata 'hyperspecies'	5001600101					
Capitellidae sp. Indet.	5001600000	1			2	
Caulleriella pacifica			1	1	1	
Chaetozone acuta						
Chaetozone nr. setosa	5001500401	1	2	5	2	2
Chaetozone sp. Indet.	5001500400					
Cirratulidae sp. Indet.	5001500000					
Cirratulidae sp. Juv.	5001500000					
Cirratulus robustus	5001500102					
'Clymenura' gracilis	5001631203					
Cossura pygodactyla	5001520106	2		2	4	
Demonax sp. Indet.	5001702800					
Diopatra ornata	5001290202	1	3	2	6	1
Dipolydora cardalia	5001430431					
Dipolydora caulleryi	5001430404					1
Dipolydora socialis	5001430402					
Dorvillea annulata	5001360502					
Dorvillea pseudorubrovittata	5001360101			4	2	1
Dorvillidae sp. Indet.	5001360000					
Drilonereis longa	5001330103					
Ehlersia heterochaeta	5001232201					
Ehlersia hyperioni	5001230321					
Ehlersia sp. Indet.	5001232200	7	4	2	2	2
Eteone sp. Indet.	5001130200		1		1	
Euchone incolor	5001700204					
Euclymeninae sp. Indet.						
Eulalia californiensis			2	1	2	1
Eumida longicornuta		1		3	1	

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Exogone lourei	5001230703					
Exogone sp. Juv.	5001230700					
Gattyana ciliata	5001020602					
Gattyana cirrosa	5001020603	1	1	2		
Glycera americana	5001270104		1			
Glycera nana		1	5	3	4	
Glycera sp. Indet.	5001270100					
Glycera sp. Juv.	5001270100					
Glycinde armigera	5001280103			1		
Glycinde polygnatha	5001280105	3	2	1	3	
Glycinde sp. Juv.	5001280100				2	
Goniada maculata	5001280202	2	1			
Harmothoe imbricata	5001020806					
Hesionidae sp. Indet.	5001210000	1		1	3	
Heteromastus filobranchus	5001600203					
Isocirrus longiceps	5001632001					
Laonice cirrata	5001430201	1	3	1	2	1
Laonice pugettensis	5001430204			1		
Leitoscoloplos pugettensis	5001401601		1	1		1
Levinsenia gracilis	5001410801			2		1
Lumbrineridae sp. Indet.	5001310000	18	21	40	33	30
Lumbrineris californiensis	5001310132	5	12	33	14	4
Lumbrineris limicola	5001310128					
Magelona longicornis	5001440105				1	
Maldanidae sp. Indet.	5001630000	1		2		1
Mediomastus sp. Indet.	5001600400			2	2	1
Mesochaetopterus taylori	5001490401					
Microphthalmus sczelkowii	5001210201					
Micropodarke dubia	5001210801					
Neosabellaria cementarium	5001650201					
Nephtys caeca	5001250103					
Nephtys cornuta	5001250104	4	4	6	25	6
Nephtys ferruginea	5001250111	4	9	10	18	6
Nephtys nr. ciliata	5001250102					
Nephtys sp. Indet.	5001250100					
Nephtys sp. Juv.	5001250100	1				
Nereidae sp. Indet.	5001240000					
Nereis procera	5001240404	3	3	4	2	3
Nereis sp. Juv.	5001240400					
Notomastus latericius	5001600306					
Notomastus sp. Indet.	5001600300					
Notomastus tenuis	5001600302	1	10	10	7	4
Odontosyllis phosphorea	5001231303			1		
Oligochaeta sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Onuphidae sp. Indet.	5001290000	1				
Onuphis elegans	5001290111					
Onuphis iridescens	5001290103					
Onuphis sp. Juv.	5001290100					
Ophelina acuminata	5001580607	1		2		
Orbiniidae sp. Indet.	5001400000					1
Paleonotus bellis	5001080101					
Paranaitis polynoides	5001130803					
Parandalia fauveli	5001220802	1		2	1	5
Paraprionospio pinnata	5001431701	1	1	4	11	2
Parougia caeca				3		
Pectinaria californiensis	5001660304			1	1	
Pectinaria granulata	5001660303					
Pectinaria sp. Indet.	5001660300					
Pholoe glabra	5001060102	1				
Pholoe minuta	5001060101					
Pholoides aspera	5001040202		1	3	2	
Phyllochaetopterus prolifica	5001490202					
Phyllodoce groenlandica	5001130102	1	2	1	1	1
Phyllodoce hartmanae	5001131402					
Phyllodoce sp. Indet.	5001131400					
Phyllodoce sp. Juv.	5001131400					
Phyllodocidae sp. Juv.	5001130000					
Phylo felix	5001400401		1	1	1	
Pilargis maculata	5001220303				1	1
Pionosyllis sp. Indet.	5001230200					
Pista bansei						
Pista elongata	5001680703				1	
Pista sp. Indet.	5001680700					
Platynereis bicanaliculata	5001240501					
Podarkeopsis glabrus	5001211903		1			
Polycirrus californicus	5001680810					
Polycirrus sp. Indet.	5001680800					
Polycirrus sp. complex						
Polydora limicola	5001430415					1
Polydora sp. Indet.	5001430400					
Polynoidae sp. Indet.	5001020000	1	1	2		1
Prionospio jubata		26	57	65	97	36
Prionospio lighti	5001430521					
Prionospio multibranchiata	5001433601				2	
Prionospio sp. Indet.	5001430500					
Prionospio sp. Juv.	5001430500					
Proclea graffi	5001681702					
Protodorvillea gracilis	5001360201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Rhodine bitorquata	5001631001					
Scoletoma luti	5001310109	8	10	12	46	6
Scoloplos armiger	5001400301					
Sigalion spinosa						
Sphaerodoropsis sphaerulifer	5001260202	3	8	4	9	2
Sphaerosyllis californiensis	5001230808					
Sphaerosyllis ranunculus						
Sphaerosyllis sp. Indet.	5001230800					
Spio cirrifera	5001430703				1	
Spio sp. Indet.	5001430700					
Spiochaetopterus costarum	5001490302	1	15	12	1	12
Spionidae sp. Juv.	5001430000					2
Spiophanes berkeleyorum	5001431004	1	1	1	5	
Sthenalais fusca	5001060306					
Streblosoma bairdi	5001682502					
Syllidae sp. Indet.	5001230000					
Syllis sp. Indet.	5001230300					
Tenonia priops	5001022302		1			1
Terebellidae sp. Juv.	5001680000					
Terebellides californica	5001690103		1			
Terebellides sp. Indet.	5001690100					
Travisia forbesii	5001580402					
Travisia sp. Juv.	5001580400					
Trochochaeta multisetosa	5001450203	2	3	2	2	1
Typosyllis harti	5001230510				1	1
MOLLUSCA						
Acila castrensis	5502020101					
Adontorhina cyclia	5515020102					
Aeolidiidae sp. Indet.	5142030000					
Alvania compacta	5103200106					
Articulata sp. Juv.						
Astarte elliptica	5515190114					
Astyris gausapata			12	7	10	1
Axinopsida serricata	5515020201	214	368	266	273	251
Balcis sp. Indet.	5103530600					
Bivalvia sp. Juv.	5500000000					3
Cardiidae sp. Juv.	5515220000					
Cardiomya pectinata	5520100101					
Chaetoderma sp. Indet.	5402010100		1	2		
Clinocardium blandum						
Clinocardium nuttalli	5515220102					
Clinocardium sp. Juv.	5515220100					
Compsomyax subdiaphana	5515470301					1

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Crepipatella lingulata	5103640301					
Cryptonatica affinis	5103760201					
Cylichna attonsa	5110040214					
Gastropoda sp. Indet.	5100000000					
Gastropteron pacificum	5110070101	1	2	2		
Hiatella arctica	5517060201					
Kurtzia arteaga	5106024101					
Lacuna vincta	5103090305					
Lirobittium sp. Indet.						
Lottia pelta						
Lottia sp. Juv.						
Lucinoma annulatum	5515010201	2		1		
Lyonsia californica	5520050202	3		1	1	
Macoma calcarea	5515310101		1		1	1
Macoma carlottensis	5515310112	1	2	5	14	
Macoma elimata	5515310102		1	4		1
Macoma inquinata	5515310115					
Macoma obliqua	5515310106	1				
Macoma sp. Juv.	5515310100	1	8	3	1	15
Macoma yoldiformis	5515310111			1		
Margarites pupillus	5102100308					
Megacrenella columbiana	5507010301	1			1	6
Melanochlamys diomedea	5110060101					
Modiolus sp. Juv.	5507010600					1
Mysella tumida	5515100102					1
Mytilidae sp. Juv.	5507010000					
Mytilus edulis sp. complex	5507010100					
Nassarius mendicus	5101080101					
Nemocardium centrifilosum	5515220301	1	1	3	2	
Nucula tenuis	5502020201		2	2	2	5
Nuculana minuta	5502040202			1		1
Nudibranchia sp. Juv.	5127000000					
Odostomia sp. Indet.	5108010100					
Olivella baetica	5105100102					
Onchidoris bilamellata	5131050507					
Pandora filosa	5520020102	1				1
Pandora sp. Juv.	5520020100					
Panomya ampla	5517060303					
Parvilucina tenuisculpta	5515010101	29	51	42	39	57
Pododesmus macroschisma	5509090101					
Protothaca staminea	5515470701					
Psephidia lordi	5515470501					
Rictaxis punctocaelatus	5110010401					
Saxidomus giganteus	5515470201		1			

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Solen sicarius	5515290201					
Tellina modesta	5515310204					
Tellina nuculoides	5515310202					
Teredinidae sp. Indet.	5518020000					
Thracia cf. challisiana	5520080207					
Thracia sp. Juv.	5520080200					
Thracia trapezoides	5520080203	1				
Thyasira gouldi	5515020325	3	4	1	3	
Turbonilla sp. Indet.	5108010200					
CRUSTACEA						
Ampelisca careyi	6169020135			1		
Ampelisca cristata	6169020112					
Ampelisca hancocki	6169020113					
Ampelisca lobata	6169020134					
Aoroides exilis	6169060106					
Aoroides inermis	6169060104		1	2		
Aoroides intermedia	6169060107					
Aruga oculata						
Balanomorpha sp. Indet.	6134000000					
Balanus glandula	6134020107					
Bopyroides hippolytes	6165040401					
Brachyura sp. Indet.	6184000000					
Byblis millsi	6169020209		1	1	1	3
Byblis sp. Indet.	6169020200					
Cancer gracilis	6188030105	1	4	2	2	1
Cancer productus	6188030101					
Caprella laeviuscula	6171010710					
Caprella mendax	6171010719					
Chthamalus dalli	6134010101					
Corophium crassicorne	6169150203					
Crangon alaskensis	6179221003		1		6	3
Crangon sp. Indet.	6179220100				1	
Crangonidae sp. Indet.	6179220000					
Cyclopoida sp. Indet.	6120000000					
Deflexilodes aenigmaticus						
Desdimelita californica	6169211005					
Diastylis santamariensis					1	
Eobrolgus chumashi	6169421902					
Euaulus pusiolus	6179160408					
Eudorella pacifica	6154040202	3	7	16	11	12
Euphilomedes carcharodonta	6111070301	88	152	140	154	97
Euphilomedes producta	6111070303	4	11	5	6	4
Exosphaeroma inornata	6161020402					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
Gammaridea sp. Indet.	6169210000					
Gammaropsis thompsoni	6169260401					
Haliophasma geminatum	6160011601					
Harpacticoida sp. Indet.	6119000000					
Hemigrapsus oregonensis	6189070102					
Heterophoxus conlanae		1		1	4	1
Hippolytidae sp. Indet.	6179160000			2		
Hippomedon coecus	6169341411		1			3
Leptochelia dubia	6157020103					1
Leptognathia gracilis	6157090102					
Mayerella banksia	6171010301					
Melphisana "bola"	6169350201					
Munnogonium tillerae	6163120303					
Mysidae sp. Indet.	6153010000					
Nebalia "pugettensis"	6145010102					
Neotrypaea sp. Indet.						
Nymphon pixellae	6001010107					
Opisa tridentata	6169342802					
Orchomene pacificus	6169342903					
Orchomene pinguis	6169342904					
Pachynus barnardi	6169343101					
Pagurus dalli	6183060223					
Pagurus granosimanus	6183060211					
Pagurus sp. Indet.	6183060200					
Parametaphoxus quaylei		4		1	4	1
Parasterope barnesi	6111030503	1	8		3	5
Peramphithoe tea				2		
Photis brevipes	6169260201					
Phoxichelidium femoratum	6001060102					
Pinnixa schmitti	6189060404	3				
Pinnixa sp. Indet.	6189060400		1			1
Pinnotheridae sp. Indet.	6189060000					
Pleusymtes sp A						
Protomedeia prudens	6169260312					
Protomedeia sp. Indet.	6169260300					
Rhepoxynius abronius	6169421504					
Rutiderma lomae	6111060103					
Solidobalanus hesperius	6134050201		1		2	
Spirontocaris snyderi	6179160204	1		1		
Spirontocaris sp. Indet.	6179160200					
Synchelidium pectinatum				2		
Synchelidium rectipalmum	6169371403					
Synchelidium variabilum						
Westwoodilla caecula	6169371502		2	2	1	

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG3-1	VG3-2	VG3-3	VG3-4	VG3-5
MISCELLANEOUS						
Amphiodia periercta	8129030107					
Amphiodia sp. Indet.	8129030100					
Amphipholis sp. Indet.	8129030900					
Amphipholis squamata	8129030202					
Amphiuridae sp. Indet.	8129030000					1
Anthozoa sp. Indet.	3740000000					
Chironomidae sp. Juv.	6505080000					
Crossaster papposus	8113010103					
Cucumaria piperata	8172060111					
Ephemeroptera sp. Juv.						
Golfingia sp. Indet.	7200020100	2	1	2	1	
Golfingia sp. Juv.	7200020100					
Holothuroidea sp. Indet.	8170000000					
Nematoda sp. Indet.	4700000000					
Nemertinea sp. Indet.	4300000000	2	3	6	4	1
Nynantheae sp. Indet.		2		3	1	2
Ophiura lutkeni	8127010607			8	1	
Ophiura sarsi	8127010610					
Ophiura sp. Indet.	8127010600		1			
Pentamera sp. Indet.	8172060300					
Phoronis sp. Indet.	7700010200					
Platyhelminthes sp. Indet.	3900000000					2
Spinulosida sp. Indet.	8112000000					1
Strongylocentrotus sp. Juv.	8149030200					
Tunicate sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Amage anops	5001670101					
Ampharete labrops	5001670215		3	3	1	
Ampharete sp. Indet.	5001670200					
Ampharete cf. crassiseta						
Ampharetidae sp. Indet.	5001670000	2	2		1	
Amphicties mucronata	5001670306					
Anobothrus gracilis	5001670701	5		3		
Aphelochaeta monilaris	5001500301					1
Aphelochaeta sp. Indet.						
Aphelochaeta sp. N-1		2	3	2	3	3
Aphrodita sp. Juv.	5001010100				1	
Aricidea ramosa	5001410706					
Aricidea wassi	5001410206				1	
Armandia brevis	5001580202					
Ascleriocheilus beringainus	5001570201					
Barantolla nr. americana	5001600601				2	1
Capitella capitata 'hyperspecies'	5001600101					
Capitellidae sp. Indet.	5001600000		1			
Caulleriella pacifica						
Chaetozone acuta						
Chaetozone nr. setosa	5001500401	2	1	1	1	2
Chaetozone sp. Indet.	5001500400					
Cirratulidae sp. Indet.	5001500000	1				
Cirratulidae sp. Juv.	5001500000					
Cirratulus robustus	5001500102					
'Clymenura' gracilis	5001631203	2		2	1	1
Cossura pygodactyla	5001520106		1			
Demonax sp. Indet.	5001702800					
Diopatra ornata	5001290202	5	6	9	3	3
Dipolydora cardalia	5001430431			1		
Dipolydora caulleryi	5001430404					
Dipolydora socialis	5001430402					
Dorvillea annulata	5001360502			1		
Dorvillea pseudorubrovittata	5001360101	1				
Dorvillidae sp. Indet.	5001360000					
Drilonereis longa	5001330103					
Ehlersia heterochaeta	5001232201	3	2	2	1	2
Ehlersia hyperioni	5001230321		1	2	1	1
Ehlersia sp. Indet.	5001232200					
Eteone sp. Indet.	5001130200				1	
Euchone incolor	5001700204			1		
Euclymeninae sp. Indet.						
Eulalia californiensis		1	1		1	
Eumida longicornuta			3		1	3

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1990						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Exogone lourei	5001230703					
Exogone sp. Juv.	5001230700					
Gattyana ciliata	5001020602					
Gattyana cirrosa	5001020603	1	1	3	3	7
Glycera americana	5001270104			1		
Glycera nana		1	6	4	14	6
Glycera sp. Indet.	5001270100					
Glycera sp. Juv.	5001270100					
Glycinde armigera	5001280103	2	1	1	2	1
Glycinde polygnatha	5001280105					
Glycinde sp. Juv.	5001280100					
Goniada maculata	5001280202	2	3	1	4	2
Harmothoe imbricata	5001020806				1	
Hesionidae sp. Indet.	5001210000					
Heteromastus filobranchus	5001600203		1			
Isocirrus longiceps	5001632001					
Laonice cirrata	5001430201	3		1		
Laonice pugettensis	5001430204					
Leitoscoloplos pugettensis	5001401601		5	1	1	3
Levinsenia gracilis	5001410801			1		1
Lumbrineridae sp. Indet.	5001310000	27	30	29	27	29
Lumbrineris californiensis	5001310132			3		
Lumbrineris limicola	5001310128					
Magelona longicornis	5001440105		1			
Maldanidae sp. Indet.	5001630000				2	
Mediomastus sp. Indet.	5001600400	1		2	1	1
Mesochaetopterus taylori	5001490401					
Microphthalmus sczelkowii	5001210201					
Micropodarke dubia	5001210801					
Neosabellaria cementarium	5001650201					
Nephtys caeca	5001250103					
Nephtys cornuta	5001250104	1	6	4	3	2
Nephtys ferruginea	5001250111	7	10	7	3	4
Nephtys nr. ciliata	5001250102					
Nephtys sp. Indet.	5001250100					
Nephtys sp. Juv.	5001250100					
Nereidae sp. Indet.	5001240000					
Nereis procera	5001240404		4	1	2	
Nereis sp. Juv.	5001240400					
Notomastus latericius	5001600306	1				
Notomastus sp. Indet.	5001600300					
Notomastus tenuis	5001600302	8	7	14	6	5
Odontosyllis phosphorea	5001231303					
Oligochaeta sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Onuphidae sp. Indet.	5001290000					
Onuphis elegans	5001290111					
Onuphis iridescens	5001290103	1			1	1
Onuphis sp. Juv.	5001290100					
Ophelina acuminata	5001580607		1		1	2
Orbiniidae sp. Indet.	5001400000					
Paleonotus bellis	5001080101					
Paranaitis polynoides	5001130803					
Parandalia fauveli	5001220802	2	3		2	
Paraprionospio pinnata	5001431701	1			2	4
Parougia caeca						
Pectinaria californiensis	5001660304					
Pectinaria granulata	5001660303		1			3
Pectinaria sp. Indet.	5001660300				1	2
Pholoe glabra	5001060102					
Pholoe minuta	5001060101					
Pholoides aspera	5001040202					
Phyllochaetopterus prolifica	5001490202					
Phyllodoce groenlandica	5001130102	2	1			
Phyllodoce hartmanae	5001131402	2				
Phyllodoce sp. Indet.	5001131400					
Phyllodoce sp. Juv.	5001131400					
Phyllodocidae sp. Juv.	5001130000					
Phylo felix	5001400401					1
Pilargis maculata	5001220303	1		1	1	
Pionosyllis sp. Indet.	5001230200					
Pista bansei						
Pista elongata	5001680703		1			
Pista sp. Indet.	5001680700					
Platynereis bicanaliculata	5001240501					
Podarkeopsis glabrus	5001211903					
Polycirrus californicus	5001680810		1			
Polycirrus sp. Indet.	5001680800					
Polycirrus sp. complex						
Polydora limicola	5001430415	1	1	1		
Polydora sp. Indet.	5001430400					
Polynoidae sp. Indet.	5001020000			1		
Prionospio jubata		37	60	67	38	75
Prionospio lighti	5001430521					
Prionospio multibranchiata	5001433601					
Prionospio sp. Indet.	5001430500					
Prionospio sp. Juv.	5001430500					
Proclea graffi	5001681702		6	2	1	
Protodorvillea gracilis	5001360201	1		1		

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Rhodine bitorquata	5001631001					
Scoletoma luti	5001310109	4	8	11	7	3
Scoloplos armiger	5001400301					
Sigalion spinosa						
Sphaerodoropsis sphaerulifer	5001260202		3	3	5	1
Sphaerosyllis californiensis	5001230808					
Sphaerosyllis ranunculus						
Sphaerosyllis sp. Indet.	5001230800					
Spio cirrifera	5001430703	1				1
Spio sp. Indet.	5001430700					
Spiochaetopterus costarum	5001490302	5	31	7	8	10
Spionidae sp. Juv.	5001430000					
Spiophanes berkeleyorum	5001431004	2		1	2	
Sthenalais fusca	5001060306					
Streblosoma bairdi	5001682502					
Syllidae sp. Indet.	5001230000					
Syllis sp. Indet.	5001230300					
Tenonia priops	5001022302					
Terebellidae sp. Juv.	5001680000					
Terebellides californica	5001690103		1			1
Terebellides sp. Indet.	5001690100		1			
Travisia forbesii	5001580402					
Travisia sp. Juv.	5001580400					
Trochochaeta multisetosa	5001450203		2		1	2
Typosyllis harti	5001230510			1		2
MOLLUSCA						
Acila castrensis	5502020101					1
Adontorhina cyclia	5515020102					
Aeolidiidae sp. Indet.	5142030000					
Alvania compacta	5103200106			1	1	
Articulata sp. Juv.						
Astarte elliptica	5515190114					
Astyris gausapata		8	4	3	3	7
Axinopsida serricata	5515020201	237	498	402	279	275
Balcis sp. Indet.	5103530600					
Bivalvia sp. Juv.	5500000000		2			
Cardiidae sp. Juv.	5515220000					
Cardiomya pectinata	5520100101	2	2		1	1
Chaetoderma sp. Indet.	5402010100					
Clinocardium blandum						
Clinocardium nuttalli	5515220102					
Clinocardium sp. Juv.	5515220100					
Compsomyax subdiaphana	5515470301	1	1	2		1

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Crepipatella lingulata	5103640301					
Cryptonatica affinis	5103760201					
Cylichna attonsa	5110040214					
Gastropoda sp. Indet.	5100000000					
Gastropteron pacificum	5110070101	1		1		
Hiatella arctica	5517060201					
Kurtzia arteaga	5106024101					
Lacuna vincta	5103090305					
Lirobittium sp. Indet.						
Lottia pelta						
Lottia sp. Juv.						
Lucinoma annulatum	5515010201		3	1		2
Lyonsia californica	5520050202	2		2	3	3
Macoma calcarea	5515310101					
Macoma carlottensis	5515310112	8	17	5	3	3
Macoma elimata	5515310102		3		1	1
Macoma inquinata	5515310115					
Macoma obliqua	5515310106	1				
Macoma sp. Juv.	5515310100	5	7	4	9	4
Macoma yoldiformis	5515310111		1			
Margarites pupillus	5102100308					
Megacrenella columbiana	5507010301	4	9	11	3	3
Melanochlamys diomedea	5110060101					
Modiolus sp. Juv.	5507010600					1
Mysella tumida	5515100102				1	2
Mytilidae sp. Juv.	5507010000				1	
Mytilus edulis sp. complex	5507010100					
Nassarius mendicus	5101080101					
Nemocardium centrifilosum	5515220301	2	5		2	1
Nucula tenuis	5502020201					1
Nuculana minuta	5502040202				1	2
Nudibranchia sp. Juv.	5127000000					
Odostomia sp. Indet.	5108010100		1			
Olivella baetica	5105100102					
Onchidoris bilamellata	5131050507					
Pandora filosa	5520020102		4			
Pandora sp. Juv.	5520020100					
Panomya ampla	5517060303					
Parvilucina tenuisculpta	5515010101	48	74	76	47	31
Pododesmus macroschisma	5509090101					
Protothaca staminea	5515470701					
Psephidia lordi	5515470501					
Rictaxis punctocaelatus	5110010401					
Saxidomus giganteus	5515470201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Solen sicarius	5515290201					
Tellina modesta	5515310204					
Tellina nuculoides	5515310202					
Teredinidae sp. Indet.	5518020000					
Thracia cf. challisiana	5520080207					
Thracia sp. Juv.	5520080200					
Thracia trapezoides	5520080203					
Thyasira gouldi	5515020325	1	2	4	2	1
Turbonilla sp. Indet.	5108010200		1			
CRUSTACEA						
Ampelisca careyi	6169020135		1		1	
Ampelisca cristata	6169020112					
Ampelisca hancocki	6169020113		1			
Ampelisca lobata	6169020134					
Aoroides exilis	6169060106			1		
Aoroides inermis	6169060104			1		
Aoroides intermedia	6169060107					
Aruga oculata						
Balanomorpha sp. Indet.	6134000000			4		
Balanus glandula	6134020107					
Bopyroides hippolytes	6165040401					
Brachyura sp. Indet.	6184000000					
Byblis millsi	6169020209	2	5	4	9	4
Byblis sp. Indet.	6169020200					
Cancer gracilis	6188030105	2	5	3	2	1
Cancer productus	6188030101					
Caprella laeviuscula	6171010710					
Caprella mendax	6171010719					
Chthamalus dalli	6134010101					
Corophium crassicorne	6169150203					
Crangon alaskensis	6179221003			2	1	2
Crangon sp. Indet.	6179220100					
Crangonidae sp. Indet.	6179220000					
Cyclopoida sp. Indet.	6120000000					
Deflexilodes aenigmaticus						2
Desdimelita californica	6169211005					
Diastylis santamariensis						
Eobrolgus chumashi	6169421902					
Euaulus pusiolus	6179160408					
Eudorella pacifica	6154040202	2	12	9	4	9
Euphilomedes carcharodonta	6111070301	172	216	177	248	208
Euphilomedes producta	6111070303	3	3	7	4	4
Exosphaeroma inornata	6161020402					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
Gammaridea sp. Indet.	6169210000					
Gammaropsis thompsoni	6169260401					
Haliophasma geminatum	6160011601					
Harpacticoida sp. Indet.	6119000000					
Hemigrapsus oregonensis	6189070102					
Heterophoxus conlanae			1	5	2	4
Hippolytidae sp. Indet.	6179160000					1
Hippomedon coecus	6169341411				1	4
Leptochelia dubia	6157020103		1			
Leptognathia gracilis	6157090102				1	
Mayerella banksia	6171010301					
Melphisana "bola"	6169350201					
Munnogonium tillerae	6163120303					
Mysidae sp. Indet.	6153010000					
Nebalia "pugettensis"	6145010102		1			
Neotrypaea sp. Indet.					1	1
Nymphon pixellae	6001010107					1
Opisa tridentata	6169342802					
Orchomene pacificus	6169342903					
Orchomene pinguis	6169342904					
Pachynus barnardi	6169343101					
Pagurus dalli	6183060223					
Pagurus granosimanus	6183060211					
Pagurus sp. Indet.	6183060200	1				2
Parametaphoxus quaylei		1	1	2	3	5
Parasterope barnesi	6111030503		1		1	1
Peramphithoe tea						
Photis brevipes	6169260201					
Phoxichelidium femoratum	6001060102					
Pinnixa schmitti	6189060404		1	1		3
Pinnixa sp. Indet.	6189060400	1	1	1	1	
Pinnotheridae sp. Indet.	6189060000					
Pleusymtes sp A						
Protomedeia prudens	6169260312					
Protomedeia sp. Indet	6169260300					
Rhepoxynius abronius	6169421504					
Rutiderma lomae	6111060103		1	1	1	
Solidobalanus hesperius	6134050201			1		
Spirontocaris snyderi	6179160204					
Spirontocaris sp. Indet.	6179160200					
Synchelidium pectinatum		1		1	1	
Synchelidium rectipalmum	6169371403					
Synchelidium variabilum						
Westwoodilla caecula	6169371502		2			2

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	VG4-1	VG4-2	VG4-3	VG4-4	VG4-5
MISCELLANEOUS						
Amphiodia periercta	8129030107					
Amphiodia sp. Indet.	8129030100					
Amphipholis sp. Indet.	8129030900					
Amphipholis squamata	8129030202					
Amphiuridae sp. Indet.	8129030000					
Anthozoa sp. Indet.	3740000000					
Chironomidae sp. Juv.	6505080000					
Crossaster papposus	8113010103	1				
Cucumaria piperata	8172060111					1
Ephemeroptera sp. Juv.						
Golfingia sp. Indet.	7200020100	3	3	2	1	2
Golfingia sp. Juv.	7200020100					
Holothuroidea sp. Indet.	8170000000					
Nematoda sp. Indet.	4700000000					
Nemertinea sp. Indet.	4300000000		2	2		
Nynantheae sp. Indet.					1	2
Ophiura lutkeni	8127010607	1	3	7	4	
Ophiura sarsi	8127010610					1
Ophiura sp. Indet.	8127010600					
Pentamera sp. Indet.	8172060300					
Phoronis sp. Indet.	7700010200					
Platyhelminthes sp. Indet.	3900000000					
Spinulosida sp. Indet.	8112000000		1			
Strongylocentrotus sp. Juv.	8149030200					
Tunicate sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Amage anops	5001670101					
Ampharete labrops	5001670215					
Ampharete sp. Indet.	5001670200					
Ampharete cf. crassiseta			3	1	3	2
Ampharetidae sp. Indet.	5001670000	1			1	
Amphicties mucronata	5001670306					
Anobothrus gracilis	5001670701	3		3		
Aphelochaeta monilaris	5001500301					
Aphelochaeta sp. Indet.						
Aphelochaeta sp. N-1		1	1			
Aphrodita sp. Juv.	5001010100					
Aricidea ramosa	5001410706					
Aricidea wassi	5001410206	1		8	2	1
Armandia brevis	5001580202					1
Ascleriocheilus beringainus	5001570201					
Barantolla nr. americana	5001600601					
Capitella capitata 'hyperspecies'	5001600101	1		1		1
Capitellidae sp. Indet.	5001600000					
Caulleriella pacifica					1	
Chaetozone acuta			1			
Chaetozone nr. setosa	5001500401	1				
Chaetozone sp. Indet.	5001500400	2	3	7	2	1
Cirratulidae sp. Indet.	5001500000					
Cirratulidae sp. Juv.	5001500000					
Cirratulus robustus	5001500102	1				
'Clymenura' gracilis	5001631203					
Cossura pygodactyla	5001520106					
Demonax sp. Indet.	5001702800	1	1	2	1	1
Diopatra ornata	5001290202	3		3	1	3
Dipolydora cardalia	5001430431					
Dipolydora caulleryi	5001430404					
Dipolydora socialis	5001430402			1		
Dorvillea annulata	5001360502			1		
Dorvillea pseudorubrovittata	5001360101					
Dorvillidae sp. Indet.	5001360000					
Drilonereis longa	5001330103					
Ehlersia heterochaeta	5001232201					
Ehlersia hyperioni	5001230321	1	1	1		
Ehlersia sp. Indet.	5001232200					
Eteone sp. Indet.	5001130200					
Euchone incolor	5001700204					
Euclymeninae sp. Indet.						
Eulalia californiensis				1		
Eumida longicornuta		1	1	15		2

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Exogone lourei	5001230703			3		
Exogone sp. Juv.	5001230700					
Gattyana ciliata	5001020602					
Gattyana cirrosa	5001020603					1
Glycera americana	5001270104	2		3	5	3
Glycera nana						
Glycera sp. Indet.	5001270100					
Glycera sp. Juv.	5001270100					
Glycinde armigera	5001280103	4		2	1	4
Glycinde polygnatha	5001280105					
Glycinde sp. Juv.	5001280100					
Goniada maculata	5001280202				1	
Harmothoe imbricata	5001020806	1		4		2
Hesionidae sp. Indet.	5001210000			1		
Heteromastus filobranchus	5001600203					
Isocirrus longiceps	5001632001					
Laonice cirrata	5001430201					
Laonice pugettensis	5001430204					
Leitoscoloplos pugettensis	5001401601	2	2	5	1	3
Levinsenia gracilis	5001410801					
Lumbrineridae sp. Indet.	5001310000			1		
Lumbrineris californiensis	5001310132	3	3	1	6	8
Lumbrineris limicola	5001310128					
Magelona longicornis	5001440105			3	1	1
Maldanidae sp. Indet.	5001630000					
Mediomastus sp. Indet.	5001600400		2	3	3	
Mesochaetopterus taylori	5001490401					
Microphthalmus sczelkowii	5001210201					
Micropodarke dubia	5001210801					
Neosabellaria cementarium	5001650201	1				
Nephtys caeca	5001250103					
Nephtys cornuta	5001250104					
Nephtys ferruginea	5001250111	1	4	3	1	2
Nephtys nr. ciliata	5001250102		2			2
Nephtys sp. Indet.	5001250100					
Nephtys sp. Juv.	5001250100					
Nereidae sp. Indet.	5001240000					
Nereis procera	5001240404					
Nereis sp. Juv.	5001240400					
Notomastus latericius	5001600306					
Notomastus sp. Indet.	5001600300					
Notomastus tenuis	5001600302					2
Odontosyllis phosphorea	5001231303					
Oligochaeta sp. Indet.						

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Onuphidae sp. Indet.	5001290000					
Onuphis elegans	5001290111					
Onuphis iridescens	5001290103				4	6
Onuphis sp. Juv.	5001290100			2		
Ophelina acuminata	5001580607			2		
Orbiniidae sp. Indet.	5001400000					
Paleonotus bellis	5001080101					
Paranaitis polynoides	5001130803					
Parandalia fauveli	5001220802					
Paraprionospio pinnata	5001431701					
Parougia caeca						
Pectinaria californiensis	5001660304					
Pectinaria granulata	5001660303			2		1
Pectinaria sp. Indet.	5001660300					
Pholoe glabra	5001060102					
Pholoe minuta	5001060101			1		1
Pholoides aspera	5001040202	13	3	6	1	1
Phyllochaetopterus prolifica	5001490202					
Phyllodoce groenlandica	5001130102	2		1		2
Phyllodoce hartmanae	5001131402					1
Phyllodoce sp. Indet.	5001131400					
Phyllodoce sp. Juv.	5001131400					
Phyllodocidae sp. Juv.	5001130000					
Phylo felix	5001400401					
Pilargis maculata	5001220303					
Pionosyllis sp. Indet.	5001230200					
Pista bansei		2		1		
Pista elongata	5001680703					
Pista sp. Indet.	5001680700	1				
Platynereis bicanaliculata	5001240501				1	2
Podarkeopsis glabrus	5001211903					
Polycirrus californicus	5001680810	1		3		1
Polycirrus sp. Indet.	5001680800			1	1	1
Polycirrus sp. complex						
Polydora limicola	5001430415					
Polydora sp. Indet.	5001430400					
Polynoidae sp. Indet.	5001020000					
Prionospio jubata		3	2	5	4	10
Prionospio lighti	5001430521			1		
Prionospio multibranchiata	5001433601					
Prionospio sp. Indet.	5001430500					
Prionospio sp. Juv.	5001430500					
Proclea graffi	5001681702					
Protodorvillea gracilis	5001360201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Rhodine bitorquata	5001631001					
Scoletoma luti	5001310109				1	
Scoloplos armiger	5001400301		2			
Sigalion spinosa				1		
Sphaerodoropsis sphaerulifer	5001260202	1				
Sphaerosyllis californiensis	5001230808			2		
Sphaerosyllis ranunculus						
Sphaerosyllis sp. Indet.	5001230800			1		
Spio cirrifera	5001430703					1
Spio sp. Indet.	5001430700	1				
Spiochaetopterus costarum	5001490302			3		1
Spionidae sp. Juv.	5001430000					
Spiophanes berkeleyorum	5001431004					
Sthenalais fusca	5001060306					
Streblosoma bairdi	5001682502				1	
Syllidae sp. Indet.	5001230000					
Syllis sp. Indet.	5001230300					
Tenonia priops	5001022302	1		2	2	
Terebellidae sp. Juv.	5001680000	1		12	1	2
Terebellides californica	5001690103					
Terebellides sp. Indet.	5001690100					
Travisia forbesii	5001580402					
Travisia sp. Juv.	5001580400	1		2		1
Trochochaeta multisetosa	5001450203					
Typosyllis harti	5001230510					
MOLLUSCA						
Acila castrensis	5502020101					
Adontorhina cyclia	5515020102					
Aeolidiidae sp. Indet.	5142030000					
Alvania compacta	5103200106					
Articulata sp. Juv.						
Astarte elliptica	5515190114			1		
Astyris gausapata				1		2
Axinopsida serricata	5515020201	4		2	1	4
Balcis sp. Indet.	5103530600					
Bivalvia sp. Juv.	5500000000					
Cardiidae sp. Juv.	5515220000			1		
Cardiomya pectinata	5520100101	1			2	
Chaetoderma sp. Indet.	5402010100					
Clinocardium blandum				2	1	
Clinocardium nuttalli	5515220102	1			1	
Clinocardium sp. Juv.	5515220100	1		1		
Compsomyax subdiaphana	5515470301					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Crepipatella lingulata	5103640301			3		
Cryptonatica affinis	5103760201				1	
Cylichna attonsa	5110040214	1				
Gastropoda sp. Indet.	5100000000					
Gastropteron pacificum	5110070101					
Hiatella arctica	5517060201					
Kurtzia arteaga	5106024101					
Lacuna vincta	5103090305					
Lirobittium sp. Indet.				2	3	
Lottia pelta						
Lottia sp. Juv.						
Lucinoma annulatum	5515010201				2	
Lyonsia californica	5520050202	1	1	4		
Macoma calcarea	5515310101	1				
Macoma carlottensis	5515310112			1		
Macoma elimata	5515310102					
Macoma inquinata	5515310115					
Macoma obliqua	5515310106		1			
Macoma sp. Juv.	5515310100			10		
Macoma yoldiformis	5515310111	1	1	6	3	8
Margarites pupillus	5102100308	1	1			
Megacrenella columbiana	5507010301	3	1	5	1	2
Melanochlamys diomedea	5110060101					
Modiolus sp. Juv.	5507010600					
Mysella tumida	5515100102	1		11		
Mytilidae sp. Juv.	5507010000					
Mytilus edulis sp. complex	5507010100					
Nassarius mendicus	5101080101				1	
Nemocardium centrifilosum	5515220301		1			
Nucula tenuis	5502020201					
Nuculana minuta	5502040202					
Nudibranchia sp. Juv.	5127000000					
Odostomia sp. Indet.	5108010100					
Olivella baetica	5105100102					
Onchidoris bilamellata	5131050507					
Pandora filosa	5520020102			2		
Pandora sp. Juv.	5520020100			1		
Panomya ampla	5517060303	1				
Parvilucina tenuisculpta	5515010101	16	8	8	16	13
Pododesmus macroschisma	5509090101					
Protothaca staminea	5515470701					
Psephidia lordi	5515470501	6	10	11	13	3
Rictaxis punctocaelatus	5110010401					
Saxidomus giganteus	5515470201					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Solen sicarius	5515290201			2		
Tellina modesta	5515310204			3		
Tellina nuculoides	5515310202	1		2		
Teredinidae sp. Indet.	5518020000	1				
Thracia cf. challisiana	5520080207			1		
Thracia sp. Juv.	5520080200			1		
Thracia trapezoides	5520080203				1	
Thyasira gouldi	5515020325					
Turbonilla sp. Indet.	5108010200					
CRUSTACEA						
Ampelisca careyi	6169020135				2	
Ampelisca cristata	6169020112	1		1	2	
Ampelisca hancocki	6169020113	1				
Ampelisca lobata	6169020134	2	1			
Aoroides exilis	6169060106					
Aoroides inermis	6169060104				1	1
Aoroides intermedia	6169060107					
Aruga oculata					1	
Balanomorpha sp. Indet.	6134000000				53	
Balanus glandula	6134020107					
Bopyroides hippolytes	6165040401					
Brachyura sp. Indet.	6184000000	1				
Byblis millsi	6169020209	1	1	1	3	3
Byblis sp. Indet.	6169020200					
Cancer gracilis	6188030105		1	1		1
Cancer productus	6188030101					1
Caprella laeviuscula	6171010710					
Caprella mendax	6171010719				1	
Chthamalus dalli	6134010101					
Corophium crassicorne	6169150203	1		12		
Crangon alaskensis	6179221003	2	5	6	1	7
Crangon sp. Indet.	6179220100		1		3	5
Crangonidae sp. Indet.	6179220000					
Cyclopoida sp. Indet.	6120000000					
Deflexilodes aenigmaticus		3	1	5	3	1
Desdimelita californica	6169211005					
Diastylis santamariensis			1	1		
Eobrolgus chumashi	6169421902	5				
Euaulus pusiolus	6179160408	1				
Eudorella pacifica	6154040202					
Euphilomedes carcharodonta	6111070301	169	340	234	215	191
Euphilomedes producta	6111070303					
Exosphaeroma inornata	6161020402					

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
Gammaridea sp. Indet.	6169210000					
Gammaropsis thompsoni	6169260401	2	5		1	2
Haliophasma geminatum	6160011601				1	
Harpacticoida sp. Indet.	6119000000					
Hemigrapsus oregonensis	6189070102					
Heterophoxus conlanae						
Hippolytidae sp. Indet.	6179160000	3				5
Hippomedon coecus	6169341411	2	2		5	1
Leptochelia dubia	6157020103			4		
Leptognathia gracilis	6157090102					
Mayerella banksia	6171010301				2	
Melphisana "bola"	6169350201					1
Munnogonium tillerae	6163120303					
Mysidae sp. Indet.	6153010000					
Nebalia "pugettensis"	6145010102	1	1	2	2	
Neotrypaea sp. Indet.			1	1	3	
Nymphon pixellae	6001010107					
Opisa tridentata	6169342802				1	
Orchomene pacificus	6169342903	2	1	5	3	1
Orchomene pinguis	6169342904				1	
Pachynus barnardi	6169343101					
Pagurus dalli	6183060223			1	1	1
Pagurus granosimanus	6183060211					
Pagurus sp. Indet.	6183060200					1
Parametaphoxus quaylei				1		
Parasterope barnesi	6111030503			2		
Peramphithoe tea						
Photis brevipes	6169260201					
Phoxichelidium femoratum	6001060102					
Pinnixa schmitti	6189060404	4	2	1	3	4
Pinnixa sp. Indet.	6189060400					
Pinnotheridae sp. Indet.	6189060000					
Pleusymtes sp A		1		2		
Protomedeia prudens	6169260312				2	5
Protomedeia sp. Indet.	6169260300			1		1
Rhepoxynius abronius	6169421504	8	10	17	10	7
Rutiderma lomae	6111060103					
Solidobalanus hesperius	6134050201					
Spirontocaris snyderi	6179160204				1	
Spirontocaris sp. Indet.	6179160200		1			
Synchelidium pectinatum		3	2	6	2	1
Synchelidium rectipalmum	6169371403		1			
Synchelidium variabilum						
Westwoodilla caecula	6169371502	2	7	1	3	3

PIER 53-55 CAP						
METRO - SEATTLE						
INVERTEBRATE SPECIES DATA						
By Marine Taxonomic Services, Ltd.						
December, 1996						
TAXON	NODOC CODE	27REF-1	27REF-2	27REF-3	27REF-4	27REF-5
MISCELLANEOUS						
Amphiodia periercta	8129030107					
Amphiodia sp. Indet.	8129030100					
Amphipholis sp. Indet.	8129030900					
Amphipholis squamata	8129030202	1				1
Amphiuridae sp. Indet.	8129030000				1	
Anthozoa sp. Indet.	3740000000	1				
Chironomidae sp. Juv.	6505080000					
Crossaster papposus	8113010103	1				
Cucumaria piperata	8172060111		3			2
Ephemeroptera sp. Juv.						
Golfingia sp. Indet.	7200020100					1
Golfingia sp. Juv.	7200020100					
Holothuroidea sp. Indet.	8170000000					
Nematoda sp. Indet.	4700000000					
Nemertinea sp. Indet.	4300000000	5	5	7	3	1
Nynantheae sp. Indet.				3		
Ophiura lutkeni	8127010607					
Ophiura sarsi	8127010610					
Ophiura sp. Indet.	8127010600					
Pentamera sp. Indet.	8172060300			2		
Phoronis sp. Indet.	7700010200	1		3		
Platyhelminthes sp. Indet.	3900000000					
Spinulosida sp. Indet.	8112000000					
Strongylocentrotus sp. Juv.	8149030200	1				
Tunicate sp. Indet.						