

APPENDIX 2. Metal concentrations in the clam *Macoma balthica* collected at the Palo Alto Mudflat. Each monthly collection is reported on two pages. The first page contains summary statistics:

Mean concentrations in microgram per gram dry tissue weight ($\mu\text{g/g}$).

STD is the standard deviation of the mean.

SEM is the standard error of the mean.

CV percent is the coefficient of variation.

$r_{wt \times []}$ is the correlation coefficient for the concentration versus weight correlation for each element.

X 100mg is the concentration interpolated from the above regression for a 100 mg animal.

$r_{l \times []}$ is the correlation coefficient for the concentration versus shell length regression.

X 20 mm and X 25 mm are concentrations interpolated from the regression for 20mm and 25 mm animals.

Content (a measure of metal bioaccumulation that is independent of mass) is also shown for 20 and 25 mm animals, as is the weight determined for animals of 15 mm and 20 mm shell length.

The second page for each month shows the analysis of each composite sample, the number of animals composited in each, concentration as calculated from sample dry weight and the dilution factor and the metal content for each sample.

Palo Alto *Macoma balthica*, Hg analysis: 1999-2001

Sample ID	mean Hg (mg/g)	SEM
PA 1/1999	0.29	0.01
PA 4/1999	0.15	0.02
PA 6/1999	0.3	0.02
PA 9/1999	0.31	0.02
PA 1/2000	0.31	0.03
PA 4/2000	0.36	0.2
PA 6/2000	0.18	0.01
PA 9/2000	0.27	0.02
PA 1/2001	0.34	0.04
PA 4/2001	0.29	
PA 6/2001	0.23	0.01
PA 9/2001	0.31	0.03

TORT-2	Found	0.34
	Accepted	0.27±0.06

SRM 2976	Found	0.04
	Accepted	0.06±0.004

Palo Alto *Macoma balthica*, Se analysis: 1999-2001

Sample ID	mean Se (µg/g)	SEM
PA 1/1999	4.7	0.2
PA 4/1999	3.3	0.1
PA 6/1999	5.3	0.2
PA 9/1999	5.5	0.2
PA 1/2000	5.9	0.1
PA 4/2000	4.93	0.5068
PA 6/2000	3.3	0.2
PA 9/2000	3.8	0.7
PA 1/2001	6.7	1
PA 4/2001	4.5	0.4
PA 6/2001	3.6	0.2
PA 9/2001	3.5	0.2

TORT-2	Found	0.34
	Accepted	0.27±0.06

SRM 2976	Found	0.04
	Accepted	0.06±0.004

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	1/15/1999							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.420	0.202	5.130	35.305	6.088	4.666	4.380	337.150
STD	2.924	0.094	1.489	14.741	1.505	1.642	1.503	110.640
SEM	0.781	0.025	0.398	3.940	0.402	0.439	0.402	29.570
CV%	85.487	46.447	29.027	41.753	24.726	35.193	34.318	32.816
n	14	3	14	14	14	14	14	14
r wt x []	0.587	0.000	0.395	0.782	0.469	0.466	0.612	0.573
X 100mg	4.252	0.000	5.415	40.887	6.431	4.295	4.825	367.877
r l x []	0.542	0.000	0.490	0.797	0.476	0.538	0.697	0.534
X 20mm	2.783	0.000	4.837	30.585	5.801	5.020	3.959	313.415
X 25mm	4.212	0.000	5.495	41.166	6.446	4.225	4.903	366.631

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.119	1.000	0.230	1.427	0.284	0.231	0.183	15.445
25mm	0.300	1.000	0.493	3.605	0.579	0.376	0.435	31.960

Estimated weight for 15mm clam

0.023 gm
23.037 mg

Estimated weight for 20mm clam

0.050 gm
50.379 mg

Estimated weight for 25mm clam

0.092 gm
92.436 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	2/26/1999							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	4.223	0.185	3.572	41.559	5.185	3.117	3.464	412.286
STD	1.710	0.066	1.027	10.680	1.469	0.956	0.929	143.451
SEM	0.493	0.019	0.296	3.083	0.424	0.276	0.268	41.411
CV%	40.482	35.594	28.750	25.699	28.340	30.665	26.825	34.794
n	12	6	12	12	12	12	12	12
r wt x []	0.178	0.000	0.211	0.211	0.228	0.539	0.310	0.345
X 100mg	3.949	0.000	39.530	39.530	4.883	2.653	3.205	367.689
r l x []	0.124	0.000	0.162	0.162	0.119	0.216	0.016	0.001
X 20mm	4.130	0.000	40.797	40.797	5.108	3.208	3.458	412.254
X 25mm	4.357	0.000	42.659	42.659	5.296	2.986	3.474	412.333

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.179	1.000	0.158	1.818	0.223	0.140	0.153	17.996
25mm	0.334	1.000	0.284	3.513	0.424	0.237	0.280	32.450

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.021 gm
21.062 mg

0.046 gm
46.035 mg

Estimated weight for 25mm clam

0.084 gm
84.428 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	3/22/1999							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.498	0.167	2.478	32.499	3.986	2.053	2.184	340.085
STD	0.814		0.519	6.826	0.358	0.181	0.414	40.885
SEM	0.271		0.173	2.275	0.119	0.060	0.138	13.628
CV%	32.599		20.925	21.005	8.979	8.832	18.935	12.022
n	9	1	9	9	9	9	9	9
r wt x []	0.565	0.000	0.452	0.614	0.329	0.543	0.454	0.635
X 100mg	2.619	0.000	2.416	33.602	4.017	2.027	2.134	346.929
r l x []	0.527	0.000	0.436	0.718	0.399	0.500	0.327	0.799
X 20mm	2.336	0.000	2.563	30.651	3.932	2.087	2.235	327.760
X 25mm	2.762	0.000	2.339	35.510	4.074	1.997	2.101	360.180

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.152	1.000	0.161	2.009	0.256	0.134	0.141	21.505
25mm	0.292	1.000	0.259	3.895	0.456	0.224	0.234	40.165

Estimated weight for 15mm clam

0.032 gm
32.259 mg

Estimated weight for 20mm clam

0.065 gm
46.035 mg

Estimated weight for 25mm clam

0.112 gm
112.149 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	4/18/1999							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.487 <lod		1.903	30.511	3.525	1.805	1.579	327.969
STD	1.353		0.464	12.603	0.385	0.496	0.355	61.914
SEM	0.451		0.155	4.201	0.128	0.165	0.118	20.638
CV%	54.386		24.361	41.305	10.909	27.492	22.491	18.878
n	9	0	9	9	9	9	9	9
r wt x []	0.323	0.000	0.330	0.412	0.300	0.275	0.085	0.372
X 100mg	2.456	0.000	1.914	30.139	3.517	1.815	1.581	326.318
r l x []	0.541	0.000	0.309	0.634	0.342	0.205	0.021	0.577
X 20mm	2.181	0.000	1.963	27.162	3.470	1.848	1.582	312.985
X 25mm	2.859	0.000	1.830	34.574	3.592	1.754	1.575	346.141

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.151	1.000	0.138	1.928	0.252	0.128	0.112	22.733
25mm	0.325	1.000	0.225	4.157	0.450	0.213	0.194	43.131

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.036 gm
35.768 mg

0.073 gm
72.624 mg

Estimated weight for 25mm clam

0.126 gm
125.793 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	5/19/99							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.758 <lod		1.762	28.792	3.347	1.320	1.626	417.058
STD	0.589		0.369	6.238	0.519	0.165	0.323	80.020
SEM	0.186		0.117	1.973	0.164	0.052	0.102	25.305
CV%	21.364		20.958	21.667	15.513	12.510	19.875	19.187
n	10	0	10	10	10	10	10	10
r wt x []	0.753	0.000	0.330	0.412	0.490	0.096	0.116	0.097
X 100mg	2.893	0.000	1.914	30.139	3.270	1.315	1.637	419.420
r l x []	0.844	0.000	0.167	0.769	0.352	0.042	0.085	0.440
X 20mm	2.499	0.000	1.794	26.296	3.442	1.323	1.612	398.734
X 25mm	3.015	0.000	1.730	31.271	3.253	1.316	1.640	435.257

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.154	1.000	0.108	1.615	0.207	0.080	0.097	24.323
25mm	0.306	1.000	0.174	3.161	0.329	0.134	0.165	44.039

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.031 gm
31.077 mg

0.061 gm
61.027 mg

Estimated weight for 25mm clam

0.103 gm
103.002 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	6/16/99							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.888 <lod		1.742	32.023	3.775	2.208	1.601	361.246
STD	1.112		0.623	5.754	0.493	0.676	0.574	92.133
SEM	0.321		0.180	1.661	0.142	0.195	0.166	26.597
CV%	38.510		35.778	17.969	13.051	30.639	35.833	25.504
n	12	0	12	12	12	12	12	12
r wt x []	0.152	0.000	0.098	0.044	0.080	0.120	0.001	0.355
X 100mg	2.875	0.000	1.738	32.042	3.778	2.214	1.601	363.747
r l x []	0.076	0.000	0.077	0.317	0.175	0.103	0.072	0.377
X 20mm	2.860	0.000	1.759	31.406	3.746	2.184	1.587	349.529
X 25mm	2.955	0.000	1.704	33.484	3.844	2.263	1.634	389.044

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.181	1.000	0.113	2.105	0.251	0.141	0.102	23.145
25mm	0.361	1.000	0.211	4.348	0.507	0.286	0.201	50.673

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.028 gm
28.262 mg

0.067 gm
67.499 mg

Estimated weight for 25mm clam

0.133 gm
132.610 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	9/13/99							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	4.595 <lod		2.260	42.741	4.419	2.527	2.208	338.885
STD	1.163		1.000	8.099	0.853	0.686	1.028	103.577
SEM	0.336		0.289	2.338	0.246	0.198	0.297	29.900
CV%	25.301		44.270	18.950	19.310	27.149	46.569	30.564
n	12	0	12	12	12	12	12	12
r wt x []	0.678	0.000	0.488	0.418	0.561	0.344	0.570	0.321
X 100mg	4.701	0.000	2.325	43.196	4.484	2.559	2.286	343.357
r l x []	0.648	0.000	0.258	0.490	0.380	0.098	0.351	0.329
X 20mm	4.208	0.000	2.127	40.698	4.252	2.492	2.022	321.325
X 25mm	4.848	0.000	2.346	44.074	4.528	2.550	2.329	350.346

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.223	1.000	0.112	2.154	0.227	0.131	0.107	16.718
25mm	0.482	1.000	0.214	4.411	0.447	0.246	0.212	33.977

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.023 gm
22.938 mg

0.053 gm
52.881 mg

Estimated weight for 25mm clam

0.101 gm
101.080 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	9/13/99							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	4.101	<lod	3.282	20.876	4.236	3.686	2.815	320.565
STD	1.659		1.715	3.634	0.996	1.465	1.060	100.981
SEM	0.627		0.648	1.373	0.376	0.554	0.401	38.167
CV%	40.451		52.235	17.407	23.513	39.740	37.649	31.501
n	7	0	7	7	7	7	7	7
r wt x []	0.880	0.000	0.726	0.521	0.482	0.775	0.684	0.235
X 100mg	4.405	0.000	3.023	21.270	4.136	3.450	2.664	325.611
r l x []	0.899	0.000	0.793	0.369	0.591	0.846	0.769	0.247
X 20mm	3.688	0.000	3.659	20.505	4.399	4.029	3.040	313.664
X 25mm	4.652	0.000	2.780	21.372	4.018	3.229	2.513	329.774

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.206	1.000	0.155	1.099	0.219	0.182	0.140	16.461
25mm	0.510	1.000	0.225	2.128	0.373	0.276	0.218	32.453

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.024 gm
23.531 mg

0.053 gm
53.276 mg

Estimated weight for 25mm clam

0.100 gm
100.416 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	12/20/99							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.452 <lod		3.354	28.668	4.505	3.291	2.937	262.463
STD	1.799		1.110	10.302	1.102	0.837	1.125	56.932
SEM	0.804		0.497	4.607	0.493	0.374	0.503	25.461
CV%	52.106		33.106	35.936	24.453	25.417	38.315	21.691
n	5	0	5	5	5	5	5	5
r wt x []	0.916	0.000	0.836	0.928	0.754	0.898	0.873	0.701
X 100mg	4.832	0.000	4.131	36.669	5.200	3.920	3.759	295.862
r l x []	0.970	0.000	0.771	0.975	0.791	0.880	0.825	0.772
X 20mm	3.891	0.000	3.569	31.193	4.724	3.476	3.171	273.513
X 25mm	5.144	0.000	4.184	38.411	5.349	4.005	3.838	305.093

Estimated content (µg) for 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
20mm	0.206	1.000	0.190	1.703	0.258	0.189	0.168	15.026
25mm	0.546	1.000	0.403	4.002	0.550	0.402	0.371	31.677

Estimated weight for 15mm clam

Estimated weight for 20mm clam

0.024 gm
24.083 mg

0.054 gm
54.193 mg

Estimated weight for 25mm clam

0.102 gm
101.663 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	2/15/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	4.009	0.307	2.972	36.580	4.513	1.183	3.029	429.142
STD	2.290	0.065	0.867	12.225	0.799	0.317	0.946	70.503
SEM	0.661	0.019	0.250	3.529	0.231	0.091	0.273	20.353
CV%	57.120	21.239	29.166	33.420	17.701	26.754	31.221	16.429
n	12	12	12	12	12	12	12	12
r wt x []	0.622	0.539	0.083	0.908	0.324	0.292	0.230	0.484
X 100mg	5.353	0.340	3.039	47.044	4.757	1.271	3.234	461.353
r l x []	0.727	0.579	0.119	0.934	0.350	0.311	0.276	0.460
X 15mm	2.373	0.270	2.870	25.362	4.238	1.087	2.772	397.253
X 20mm	3.991	0.306	2.971	36.455	4.510	1.182	3.026	428.788
X 25mm	5.609	0.343	3.071	47.548	4.782	1.278	3.280	460.322

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.050	0.006	0.068	0.632	0.102	0.026	0.065	9.457
20mm	0.185	0.016	0.153	1.923	0.240	0.062	0.156	22.880
25mm	0.506	0.033	0.287	4.560	0.464	0.121	0.307	45.401

Estimated weight for 15mm clam

0.024 gm
24.273 mg

Estimated weight for 20mm clam

0.054 gm
53.507 mg

Estimated weight for 25mm clam

0.099 gm
98.785 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	3/20/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	5.162	0.426	3.595	47.687	5.472	1.234	3.881	489.709
STD	2.866	0.147	1.397	17.594	1.671	0.456	1.585	105.286
SEM	0.864	0.044	0.421	5.305	0.504	0.137	0.478	31.745
CV%	55.519	34.420	38.870	36.894	30.534	36.915	40.830	21.500
n	11	11	11	11	11	11	11	11
r wt x []	0.844	0.800	0.735	0.698	0.794	0.742	0.756	0.835
X 100mg	5.078	0.422	3.560	47.263	5.426	1.222	3.840	486.676
r l x []	0.903	0.874	0.799	0.809	0.834	0.813	0.828	0.857
X 15mm	1.177	0.229	1.876	25.763	3.327	0.664	1.862	350.805
X 20mm	3.382	0.338	2.827	37.896	4.514	0.979	2.979	427.675
X 25mm	5.587	0.447	3.779	50.028	5.701	1.295	4.097	504.544

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.040	0.008	0.069	0.938	0.118	0.023	0.067	11.797
20mm	0.170	0.022	0.181	2.423	0.291	0.061	0.186	27.314
25mm	0.520	0.046	0.381	5.059	0.584	0.131	0.412	52.387

Estimated weight for 15mm clam

0.035 gm
34.801 mg

Estimated weight for 20mm clam

0.064 gm
64.372 mg

Estimated weight for 25mm clam

0.104 gm
103.723 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	4/10/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	1.885	0.385	3.049	21.026	4.007	0.935	2.896	241.020
STD	1.496	0.078	0.868	6.620	0.930	0.260	0.880	44.963
SEM	0.400	0.021	0.232	1.769	0.249	0.070	0.235	12.017
CV%	79.355	20.258	28.468	31.484	23.210	27.861	30.380	18.655
n	14	14	14	14	14	14	14	14
r wt x []	0.839	0.378	0.357	0.750	0.445	0.344	0.448	0.593
X 100mg	1.509	0.393	3.142	19.537	3.883	0.961	3.014	233.027
r l x []	0.873	0.391	0.396	0.784	0.471	0.370	0.484	0.672
X 15mm	0.486	0.417	3.417	15.467	3.538	1.038	3.352	208.632
X 20mm	1.574	0.392	3.131	19.788	3.903	0.958	2.997	233.810
X 25mm	2.661	0.366	2.844	24.109	4.267	0.877	2.642	258.989

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.029	0.018	0.151	0.689	0.156	0.046	0.148	8.968
20mm	0.121	0.035	0.274	1.811	0.357	0.084	0.260	21.505
25mm	0.367	0.058	0.435	3.832	0.677	0.135	0.403	42.379

Estimated weight for 15mm clam

0.044 gm
44.066 mg

Estimated weight for 20mm clam

0.092 gm
92.115 mg

Estimated weight for 25mm clam

0.163 gm
163.198 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	6/19/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	1.270	0.143	2.020	18.841	3.094	0.815	1.202	206.928
STD	0.823	0.029	1.169	8.738	0.677	0.194	0.382	39.253
SEM	0.238	0.008	0.338	2.523	0.195	0.056	0.110	11.331
CV%	64.812	20.299	57.891	46.380	21.873	23.757	31.770	18.969
n	12	12	12	12	12	12	12	12
r wt x []	0.556	0.446	0.564	0.146	0.514	0.715	0.672	0.320
X 100mg	1.249	0.144	2.050	18.783	3.110	0.821	1.213	206.359
r l x []	0.525	0.527	0.664	0.179	0.550	0.653	0.740	0.192
X 15mm	0.715	0.163	3.016	16.830	3.571	0.977	1.564	197.279
X 20mm	1.244	0.144	2.066	18.747	3.117	0.822	1.219	206.479
X 25mm	1.772	0.125	1.117	20.664	2.662	0.668	0.873	215.678

Estimated content (ug) for 15mm and 20mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.022	0.005	0.086	0.498	0.109	0.030	0.048	5.927
20mm	0.093	0.012	0.153	1.483	0.255	0.067	0.096	17.203
25mm	0.285	0.023	0.238	3.456	0.493	0.125	0.166	39.316

Estimated weight for 15mm clam

0.030 gm
30.295 mg

Estimated weight for 20mm clam

0.084 gm
84.388 mg

Estimated weight for 25mm clam

0.187 gm
186.798 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	9/13/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.493	0.219	2.696	34.656	4.598	1.172	1.927	194.981
STD	1.194	0.036	0.583	5.296	0.596	0.267	0.449	56.823
SEM	0.319	0.010	0.156	1.416	0.159	0.071	0.120	15.187
CV%	47.916	16.367	21.616	15.283	12.964	22.817	23.313	29.143
n	14	14	14	14	14	14	14	14
r wt x []	0.809	0.308	0.391	0.011	0.048	0.818	0.113	0.066
X 100mg	2.637	0.218	2.662	34.647	4.602	1.139	1.920	194.422
r l x []	0.789	0.271	0.495	0.175	0.274	0.884	0.174	0.003
X 15mm	0.891	0.236	3.187	33.081	4.320	1.574	2.061	195.232
X 20mm	2.019	0.224	2.841	34.191	4.516	1.291	1.967	195.056
X 25mm	3.148	0.213	2.495	35.300	4.712	1.007	1.873	194.879

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.027	0.006	0.076	0.775	0.100	0.039	0.049	4.517
20mm	0.113	0.013	0.162	1.993	0.263	0.073	0.113	10.999
25mm	0.341	0.025	0.290	4.148	0.557	0.119	0.214	21.937

Estimated weight for 15mm clam

0.023 gm
23.168 mg

Estimated weight for 20mm clam

0.058 gm
58.441 mg

Estimated weight for 25mm clam

0.120 gm
119.787 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	11/9/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	2.209	0.401	3.101	29.238	4.187	1.213	2.817	148.462
STD	0.989	0.308	1.845	13.035	1.716	0.685	1.375	68.228
SEM	0.350	0.109	0.652	4.609	0.607	0.242	0.486	24.122
CV%	44.764	76.784	59.492	44.583	40.976	56.488	48.790	45.956
n	8	8	8	8	8	8	8	8
r wt x []	0.431	0.727	0.781	0.802	0.705	0.783	0.813	0.792
X 100mg	2.101	0.345	2.736	26.597	3.881	1.078	2.535	134.799
r l x []	0.715	0.896	0.896	0.820	0.770	0.881	0.886	0.833
X 15mm	2.883	0.665	4.676	39.436	5.446	1.789	3.979	202.656
X 20mm	2.125	0.369	2.906	27.979	4.031	1.142	2.674	141.769
X 25mm	1.368	0.073	1.136	16.521	2.616	0.495	1.369	80.882

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.073	0.015	0.113	1.009	0.141	0.044	0.101	5.161
20mm	0.148	0.022	0.188	1.918	0.281	0.075	0.179	9.634
25mm	0.254	0.031	0.278	3.155	0.478	0.113	0.281	15.634

Estimated weight for 15mm clam

0.029 gm
28.621 mg

Estimated weight for 20mm clam

0.076 gm
75.872 mg

Estimated weight for 25mm clam

0.162 gm
161.619 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	12/12/00							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.387	0.297	2.239	37.164	4.370	1.266	2.665	212.218
STD	2.125	0.075	0.724	8.144	0.659	0.324	0.688	61.450
SEM	0.589	0.021	0.201	2.259	0.183	0.090	0.191	17.043
CV%	62.735	25.125	32.325	21.914	15.086	25.587	25.796	28.956
n	13	13	13	13	13	13	13	13
r wt x []	0.666	0.123	0.038	0.263	0.020	0.524	0.118	0.284
X 100mg	3.496	0.296	2.237	37.329	4.369	1.253	2.659	213.565
r l x []	0.608	0.112	0.027	0.271	0.004	0.526	0.085	0.256
X 15mm	1.589	0.308	2.266	34.091	4.366	1.503	2.746	190.352
X 20mm	2.703	0.301	2.249	35.995	4.368	1.356	2.696	203.897
X 25mm	3.816	0.294	2.232	37.898	4.371	1.210	2.646	217.442

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.039	0.008	0.058	0.856	0.113	0.039	0.070	4.781
20mm	0.138	0.017	0.124	2.015	0.247	0.074	0.149	11.324
25mm	0.364	0.030	0.222	3.916	0.451	0.122	0.268	22.106

Estimated weight for 15mm clam

0.026 gm
25.855 mg

Estimated weight for 20mm clam

0.057 gm
56.886 mg

Estimated weight for 25mm clam

0.105 gm
104.866 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	1/9/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.771	0.324	2.639	35.994	4.309	1.197	2.968	279.001
STD	1.891	0.066	0.592	4.201	0.719	0.201	0.680	63.852
SEM	0.570	0.020	0.178	1.267	0.217	0.060	0.205	19.252
CV%	50.157	20.401	22.428	11.671	16.685	16.760	22.915	22.886
n	11	11	11	11	11	11	11	11
r wt x []	0.785	0.918	0.594	0.752	0.881	0.836	0.978	0.293
X 100mg	5.018	0.375	2.935	38.646	4.842	1.337	3.527	294.693
r l x []	0.669	0.847	0.372	0.748	0.774	0.720	0.938	0.060
X 15mm	2.469	0.267	2.413	32.757	3.737	1.048	2.311	275.058
X 20mm	3.629	0.318	2.615	35.642	4.247	1.180	2.897	278.574
X 25mm	4.790	0.370	2.817	38.528	4.758	1.313	3.482	282.089

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.073	0.007	0.063	0.850	0.099	0.028	0.062	7.106
20mm	0.184	0.017	0.137	1.897	0.226	0.063	0.154	14.421
25mm	0.375	0.033	0.248	3.534	0.428	0.118	0.314	24.969

Estimated weight for 15mm clam

0.026 gm
25.549 mg

Estimated weight for 20mm clam

0.053 gm
52.910 mg

Estimated weight for 25mm clam

0.093 gm
93.064 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	2/5/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.674	0.312	4.021	32.101	4.904	1.196	3.467	349.759
STD	1.722	0.074	1.124	8.388	0.876	0.313	1.008	70.399
SEM	0.574	0.025	0.375	2.796	0.292	0.104	0.336	23.466
CV%	46.874	23.751	27.955	26.129	17.868	26.199	29.074	20.128
n	9	9	9	9	9	9	9	9
r wt x []	0.781	0.479	0.113	0.692	0.620	0.046	0.077	0.550
X 100mg	4.389	0.331	3.954	35.185	5.193	1.188	3.508	370.324
r l x []	0.646	0.470	0.068	0.578	0.567	0.010	0.119	0.391
X 15mm	2.701	0.282	4.088	27.861	4.470	1.198	3.362	325.711
X 20mm	3.563	0.309	4.029	31.620	4.855	1.196	3.455	347.030
X 25mm	4.426	0.336	3.970	35.379	5.240	1.194	3.547	368.350

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.084	0.008	0.113	0.836	0.130	0.034	0.093	9.594
20mm	0.205	0.018	0.231	1.882	0.289	0.069	0.199	20.562
25mm	0.409	0.034	0.401	3.529	0.538	0.121	0.359	37.140

Estimated weight for 15mm clam

0.029 gm
28.942 mg

Estimated weight for 20mm clam

0.060 gm
59.627 mg

Estimated weight for 25mm clam

0.104 gm
104.456 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	4/10/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	1.892	0.235	3.048	24.037	4.138	1.016	2.565	306.030
STD	0.953	0.052	0.848	14.693	1.323	0.196	0.763	90.045
SEM	0.275	0.015	0.245	4.242	0.382	0.056	0.220	25.994
CV%	50.358	22.225	27.804	61.128	31.961	19.252	29.760	29.423
n	12	12	12	12	12	12	12	12
r wt x []	0.728	0.514	0.365	0.605	0.767	0.161	0.447	0.530
X 100mg	2.523	0.260	3.329	32.123	5.062	1.045	2.876	349.418
r l x []	0.861	0.638	0.448	0.711	0.867	0.336	0.532	0.655
X 15mm	1.330	0.213	2.788	16.877	3.352	0.971	2.287	265.594
X 20mm	2.148	0.246	3.167	27.293	4.496	1.037	2.691	324.424
X 25mm	2.965	0.279	3.546	37.710	5.639	1.102	3.096	383.254

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.044	0.007	0.092	0.606	0.114	0.032	0.075	9.072
20mm	0.143	0.017	0.219	1.736	0.311	0.072	0.187	22.236
25mm	0.355	0.034	0.431	3.929	0.673	0.135	0.378	44.571

Estimated weight for 15mm clam

0.034 gm
33.765 mg

Estimated weight for 20mm clam

0.071 gm
70.559 mg

Estimated weight for 25mm clam

0.125 gm
124.975 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	5/8/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	1.504	0.173	1.929	21.291	3.057	0.739	1.531	265.730
STD	0.838	0.035	0.648	6.004	0.836	0.163	0.583	36.925
SEM	0.296	0.012	0.229	2.123	0.295	0.058	0.206	13.055
CV%	55.712	20.289	33.567	28.200	27.329	22.089	38.072	13.896
n	8	8	8	8	8	8	8	8
r wt x []	0.627	0.192	0.035	0.814	0.592	0.343	0.297	0.133
X 100mg	1.785	0.176	1.917	23.903	3.322	0.769	1.624	263.110
r l x []	0.687	0.275	0.072	0.899	0.682	0.385	0.384	0.028
X 15mm	1.043	0.165	1.892	16.967	2.600	0.689	1.352	264.891
X 20mm	1.660	0.175	1.942	22.750	3.211	0.756	1.592	266.013
X 25mm	2.277	0.186	1.992	28.533	3.822	0.824	1.832	267.135

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.036	0.005	0.061	0.562	0.087	0.023	0.043	8.841
20mm	0.117	0.013	0.144	1.743	0.244	0.057	0.118	20.339
25mm	0.289	0.027	0.282	4.195	0.540	0.117	0.258	38.813

Estimated weight for 15mm clam

0.034 gm
33.738 mg

Estimated weight for 20mm clam

0.077 gm
76.918 mg

Estimated weight for 25mm clam

0.146 gm
145.760 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	6/12/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	1.332	0.136	1.547	22.066	2.905	1.006	0.994	229.066
STD	0.227	0.027	0.273	3.319	0.299	0.310	0.243	40.009
SEM	0.092	0.011	0.112	1.355	0.122	0.127	0.099	16.333
CV%	17.005	20.189	17.680	15.041	10.290	30.841	24.448	17.466
n	6	6	6	6	6	6	6	6
r wt x []	0.223	0.601	0.049	0.854	0.361	0.777	0.509	0.315
X 100mg	1.430	0.104	1.573	16.575	2.696	0.539	0.755	204.661
r l x []	0.190	0.614	0.013	0.825	0.436	0.830	0.562	0.357
X 15mm	1.298	0.149	1.550	24.208	3.008	1.207	1.101	240.243
X 20mm	1.366	0.123	1.544	19.915	2.803	0.803	0.887	217.845
X 25mm	1.434	0.096	1.538	15.622	2.598	0.400	0.673	195.447

Estimated content (ug) for 15mm and 20mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.043	0.005	0.051	0.785	0.098	0.038	0.035	7.828
20mm	0.097	0.009	0.110	1.442	0.202	0.059	0.064	15.460
25mm	0.183	0.014	0.200	2.311	0.355	0.083	0.101	26.209

Estimated weight for 15mm clam

0.033 gm
32.851 mg

Estimated weight for 20mm clam

0.073 gm
72.561 mg

Estimated weight for 25mm clam

0.134 gm
134.168 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	9/18/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.545	0.264	2.367	37.297	4.963	1.508	2.664	247.154
STD	0.711	0.031	0.375	4.207	0.337	0.261	0.414	66.504
SEM	0.225	0.010	0.119	1.330	0.107	0.082	0.131	21.030
CV%	20.043	11.721	15.865	11.280	6.791	17.269	15.529	26.908
n	10	10	10	10	10	10	10	10
r wt x []	0.256	0.479	0.260	0.190	0.193	0.643	0.264	0.268
X 100mg	3.708	0.251	2.280	36.585	5.021	1.359	2.567	263.007
r l x []	0.444	0.491	0.346	0.251	0.140	0.632	0.296	0.413
X 15mm	3.191	0.281	2.513	38.483	4.910	1.694	2.802	216.306
X 20mm	3.574	0.263	2.355	37.201	4.968	1.494	2.653	249.651
X 25mm	3.957	0.244	2.197	35.920	5.025	1.293	2.505	282.997

Estimated content (ug) for 15mm and 20mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.074	0.007	0.059	0.902	0.114	0.040	0.065	5.039
20mm	0.209	0.015	0.136	2.171	0.292	0.086	0.154	14.390
25mm	0.464	0.030	0.262	4.291	0.607	0.157	0.301	32.474

Estimated weight for 15mm clam

0.023 gm
23.336 mg

Estimated weight for 20mm clam

0.059 gm
58.945 mg

Estimated weight for 25mm clam

0.121 gm
120.942 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	10/15/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	3.215	0.212	1.653	30.140	4.241	1.153	1.871	197.189
STD	0.888	0.028	0.264	6.508	0.295	0.117	0.183	33.135
SEM	0.362	0.012	0.108	2.657	0.120	0.048	0.075	13.527
CV%	27.615	13.378	15.977	21.593	6.948	10.180	9.776	16.803
n	6	6	6	6	6	6	6	6
r wt x []	0.429	0.788	0.584	0.544	0.330	0.798	0.368	0.192
X 100mg	2.695	0.181	1.442	25.305	4.374	1.025	1.779	188.500
r l x []	0.493	0.779	0.592	0.551	0.231	0.814	0.393	0.291
X 15mm	3.638	0.233	1.804	33.610	4.175	1.245	1.940	206.518
X 20mm	3.109	0.206	1.615	29.272	4.258	1.130	1.853	194.856
X 25mm	2.580	0.180	1.426	24.934	4.340	1.014	1.766	183.194

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.093	0.006	0.048	0.882	0.111	0.033	0.051	5.421
20mm	0.177	0.012	0.094	1.682	0.252	0.066	0.109	11.374
25mm	0.292	0.020	0.159	2.775	0.478	0.114	0.196	20.210

Estimated weight for 15mm clam

0.026 gm
26.492 mg

Estimated weight for 20mm clam

0.059 gm
59.366 mg

Estimated weight for 25mm clam

0.111 gm
111.005 mg

Station:	Palo Alto		<u>Statistical Summary</u>					
Date:	12/11/01							
	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
Mean(ug/g)	4.954	0.339	2.694	43.852	6.219	1.589	3.044	272.752
STD	1.087	0.074	0.412	9.193	1.307	0.193	0.607	74.455
SEM	0.384	0.026	0.146	3.250	0.462	0.068	0.215	26.324
CV%	21.950	21.852	15.284	20.964	21.014	12.177	19.954	27.298
n	8	8	8	8	8	8	8	8
r wt x []	0.742	0.657	0.703	0.388	0.479	0.331	0.797	0.696
X 100mg	5.913	0.397	3.038	48.098	6.963	1.665	3.620	334.370
r l x []	0.757	0.650	0.664	0.392	0.485	0.331	0.775	0.668
X 15mm	4.266	0.299	2.465	40.843	5.690	1.535	2.651	231.170
X 20mm	5.070	0.346	2.732	44.360	6.308	1.598	3.111	279.764
X 25mm	5.873	0.393	2.999	47.877	6.927	1.660	3.571	328.358

Estimated content (ug) for 15mm, 20mm and 25mm clam

	Ag	Cd	Cr	Cu	Ni	Pb	V	Zn
15mm	0.095	0.007	0.055	0.883	0.128	0.034	0.060	5.205
20mm	0.254	0.017	0.137	2.214	0.313	0.080	0.156	13.799
25mm	0.546	0.036	0.277	4.516	0.625	0.154	0.326	29.397

Estimated weight for 15mm clam

0.022 gm
22.228 mg

Estimated weight for 20mm clam

0.050 gm
50.255 mg

Estimated weight for 25mm clam

0.095 gm
94.619 mg