

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

**UPPER NORTH FORK
FEATHER RIVER PROJECT
FERC NO. 2105**

APPLICATION FOR NEW LICENSE

FINAL: OCTOBER 2002

VOLUME 6 of 8

APPENDICES



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*5-100
PR ✓
Fish
Tissue
Results of
QA/QC
Aug 2001
Sampling*

3.1.4 Fish and Crayfish Tissue Analysis

The resource agencies and NGOs in early 2001 expressed concern regarding the potential for bioaccumulation of silver (from the Licensee's cloud seeding operations, see Water Quality Section E2), methyl mercury (from historic mining operations in the Seneca Reach), and PCBs in Belden Forebay (from a landslide and spill in 1984) and in the Belden Reach below the forebay's dredge disposal pile (from remediation of the forebay following the spill). Based on these concerns, the Licensee agreed to collect fish and crayfish from both the forebay and from the Belden Reach below the dredge disposal pile for tissue analysis. Specifically, the Licensee was requested and agreed to collect and analyze Sacramento sucker and crayfish from Belden Forebay for silver, methyl mercury, and PCBs and for only PCBs in the Belden Reach below the dredge disposal pile located a short distance below Belden Dam (Figure E3.1.4-1).

Fish and crayfish were collected in Belden Forebay on the night of August 14, 2001 using two 100-foot long by 8-foot deep variable mesh gill nets, and the following day in the Belden Reach below the dredge disposal pile using backpack electrofishers. In addition to collecting and analyzing Sacramento sucker and crayfish in the forebay, the Licensee also elected to include one rainbow trout, one brown trout, and two smallmouth bass that had also been caught by the gill nets. About 12 crayfish (*Pacifasticus leniusculus*) collected as part of the gill net sampling effort were also saved for tissue analysis. In addition to collecting four Sacramento sucker and six crayfish (*P. leniusculus*) in the Belden Reach, the Licensee also collected four rainbow trout for PCB analysis. All collected fish and

crayfish were identified to species, measured to the nearest mm (fork length, fish only), and wrapped in aluminum foil, each with a unique identification number (all crayfish collected at each site were composited, resulting in only two crayfish samples, one for each site). All samples were then placed in an ice chest with dry ice for transport to the laboratory for analysis. All field collection and preservation techniques followed protocols supplied by the laboratories for tissue analysis. A chain of custody form was filled out on site and was included with the samples prior to shipping.

Silver, methyl, and inorganic mercury analyses were performed by Frontier Geosciences, Seattle WA., and PCB analysis was performed by Axys Analytical Services Ltd, Sydney, B.C. using ultra-clean sample handling techniques. All fish and crayfish were analyzed as whole specimens, i.e., the entire fish or crayfish was homogenized. The tissue analysis results for collected fish and crayfish are presented in Table E3.1.4-1. Included in this table are sample criteria from various agencies, including the Food and Drug Administration (FDA), Environmental Protection Agency (EPA), and the San Francisco Estuary Institute (SFEI) for the substances analyzed in this study.

The level of silver in all of the fish and crayfish sampled ranged from a low of 0.002 parts per million (ppm) in a smallmouth bass to 0.023 ppm in the composited crayfish sample in Belden Forebay. These levels are from 5 to 50 times lower than the listed California drinking water standard maximum concentration level of 0.1 ppm.

Table E3.1.4-1

Fish and crayfish tissue analysis for silver, mercury, and PCB's in Belden Forebay and Belden Reach and Belden Reach below dredge disposal pile and various sample action, allowable, and screening levels.

Belden Forebay							
SAMPLE ID	SPECIES	Length (mm)	Silver (Ag) (ppm)	Methyl Mercury (ppb)	Hg (II) (ppb)	Total Mercury (ppb)	Total PCBs (ppb)
CA1 RT1	Rainbow Trout	229	0.014	53.5	1.1	54.5	2.60
CA1 BT1	Brown Trout	280	0.010	69.1	1.4	70.6	9.70
CA1 SS1	Sacramento Sucker	358	0.005	53.2	1.4	54.7	11.00
CA1 SS2	Sacramento Sucker	333	0.006	91.1	1.8	92.8	14.60
CA1 SS3	Sacramento Sucker	340	0.005	89.0	1.9	90.8	13.10
CA1 SB1	Smallmouth Bass	180	0.004	111.0	3.3	114.0	5.70
CA1 SB2	Smallmouth Bass	175	0.002	55.6	1.0	56.7	14.90
CA1 CF1/CF2	Crayfish	various	0.023	31.5	1.8	33.3	0.80
North Fork Feather River below dredge disposal pile							
SAMPLE ID	SPECIES	Length (mm)	Silver (Ag) (ppm)	Methyl Mercury (ppb)	Hg (II) (ppb)	Total Mercury (ppb)	Total PCBs (ppb)
BR1 RT1	Rainbow Trout	202					5.50
BR1 RT2	Rainbow Trout	203					5.20
BR1 RT3	Rainbow Trout	172					5.10
BR1 RT4	Rainbow Trout	295					6.70
BR1 SS1	Sacramento Sucker	365					7.30
BR1 SS2	Sacramento Sucker	360					6.40
BR1 SS3	Sacramento Sucker	425					4.70
BR1 SS4	Sacramento Sucker	418					2.30
BR1 CF1	Crayfish	various					0.20
Sample Criteria							
Sample action, advisory, and screening levels			Silver (Ag) (ppm)	Methyl Mercury (ppb)	Hg (II) (ppb)	Total Mercury (ppb)	Total PCBs (ppb)
FDA Action Level			na	100			na
FDA Allowable Level				-			2,000
EPA/ODH Advisory				350			-
EPA Screening Level				-			10
SFEI Screening Level				300			20
SFEI median-largemouth bass				350			6.1
SFEI range-largemouth bass				84 - 670			2 - 112
CDWS, Secondary MCL			0.1	na			na

Legend:

CA= Caribou Afterbay

BR= Belden Reach

ppm = parts per million and ppb = parts per billion

FDA Allowable Level for commercial interstate commerce.

ODH = Oregon Health Division

SFEI = San Francisco Estuary Institute, Delta Fish Contaminant Monitoring (2000)

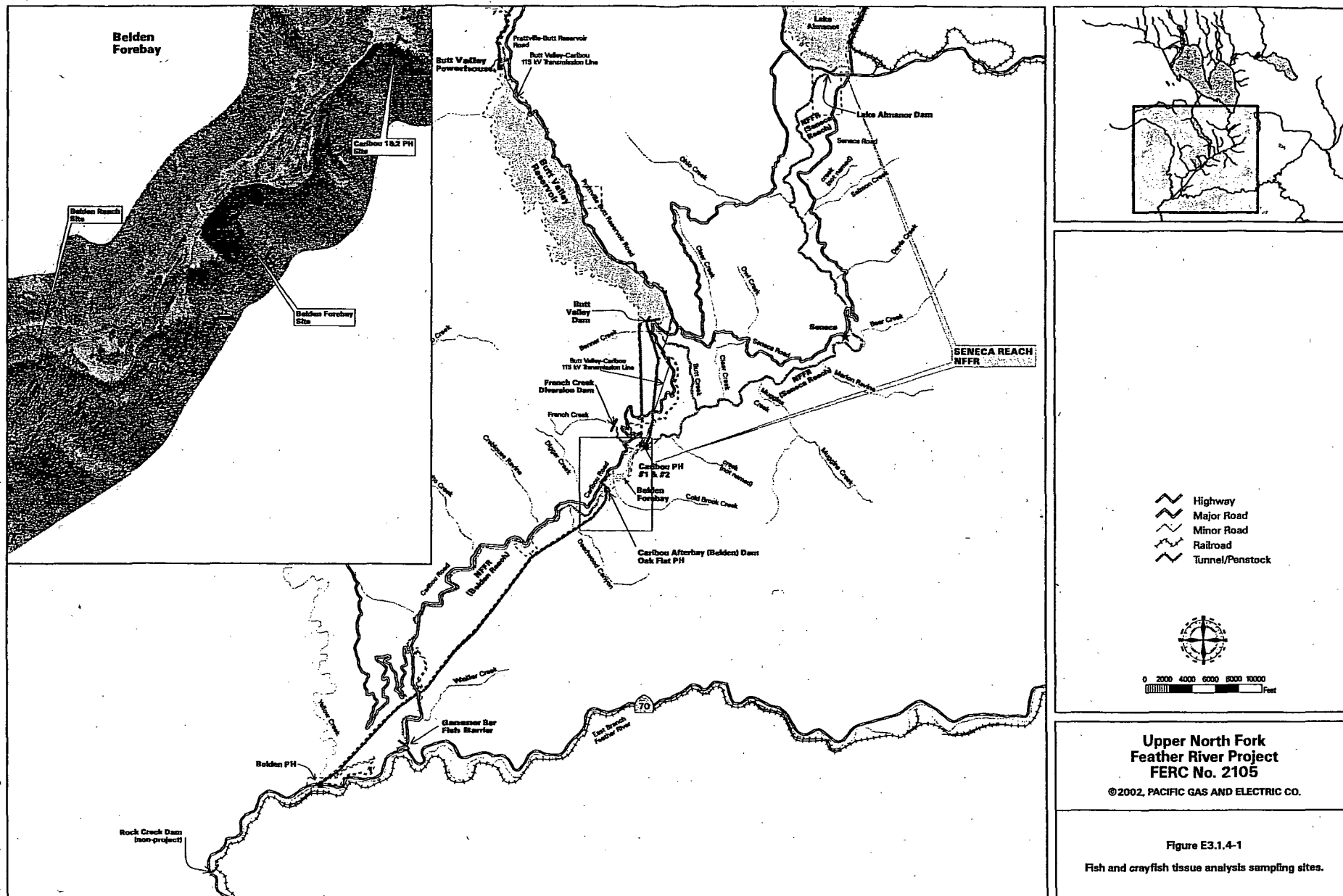
CDWS = California Drinking Water Standards; MCL = Maximum Concentration Level

Methyl mercury ranged from 31.5 parts per billion (ppb) in the composited crayfish sample to 111.0 ppb in a smallmouth bass in the Belden Forebay. With the exception of the single smallmouth bass sample, the rest of the samples were below the FDA action level of 100 ppb, and all were below the SFEI screening level of 300 ppb and the EPA advisory level of 350 ppb. Both inorganic and total mercury levels are also reported; however, there are no current criteria for these constituents.

Total PCB levels (a summation of the 209 separate congeners for each sampled organism) ranged from 0.8 ppb in the crayfish to 14.9 ppb in a smallmouth bass in the Belden Forebay and from 0.2 ppb in crayfish to 7.3 ppb in a Sacramento sucker in the Belden Reach below the dredge disposal pile. All PCB levels were below the FDA allowable level of 2000 ppb. Although four fish (all of the suckers and one smallmouth bass collected from the forebay) were above the EPA screening level of 10 ppb, they were still below the SFEI screening level of 20 ppb. Due to changes in analytical methodologies in the elapsed time between the PCB contaminated oil spill into the Belden Forebay in 1984 and this evaluation, it is not possible to directly compare the results from the fish tissue sampling conducted in 1984 and 1988 with this effort.

3.1.5 Sensitive Aquatic Species

The following section provides information on sensitive fish, amphibian, and aquatic reptile species that are either known to occur in the project vicinity or which have been identified as a sensitive species by either the Plumas National forest (PNF) and/or the



Fish and Crayfish Tissue Analysis Data Report

Section A: PCB Data Report

- A-1: PCB Congener Calculated TEQ Values per Sample for the North Fork Feather River
- A-2: Fish Tissue Samples (PCB congener Analysis) from Fish Collected August 14th and 15th, 2001 on the North fork Feather River
- A-3: Form 1C PCB Congener TEQ Analysis Report
- A-4: PCB Congener Concentration Figures

Section B: Silver and Mercury in Tissue Samples Report

Section A-1

PCB Congener Calculated TEQ Values per Sample for the North Fork Feather River

PCB Congener Calculated TEQ Values per Sample for the North Fork Feather River						
Sample Location	Axys Lab SAMPLE ID	Ecorp SAMPLE ID	SPECIES	Length (mm)	TEQ ND=0 pg/g	TEQ ND=1/2 DL pg/g
NFFR below Belden Dam	L3739 - 1	BR1 RT1	Rainbow trout	202	0.192	0.051
	L3739 - 2	BR1 RT2	Rainbow trout	203	0.109	0.031
	L3739 - 3	BR1 RT3	Rainbow trout	172	0.167	0.046
	L3739 - 4	BR1 RT4	Rainbow trout	295	0.229	0.050
	L3739 - 5	BR1 SS1	Sacramento sucker	365	0.084	0.067
	L3739 - 6	BR1 SS2	Sacramento sucker	360	0.068	0.069
	L3739 - 7	BR1 SS3	Sacramento sucker	425	0.145	0.040
	L3739 - 8	BR1 SS4	Sacramento sucker	418	0.065	0.025
	L3739 - 9i	BR1 CF1	Crayfish		0.004	0.005
Belden Forebay	L3739 - 10	CA1 RT1	Rainbow trout	229	0.163	0.030
	L3739 - 11	CA1 BT1	Brown trout	280	0.394	0.065
	L3739 - 12	CA1 SS1	Sacramento sucker	358	0.250	0.063
	L3739 - 13	CA1 SS2	Sacramento sucker	333	0.150	0.081
	L3739 - 14	CA1 SS3	Sacramento sucker	340	0.319	0.064
	L3739 - 15	CA1 SB1	Smallmouth bass	180	0.215	0.040
	L3739 - 16	CA1 SB2	Smallmouth bass	175	0.787	0.062
	L3739 - 17i	CA1 CF1/CF2	Crayfish		0.008	0.006

Notes:

TEQ= Toxic Equivalent Quotient

ND= Non-detect

Section A-2

**Fish Tissue Samples (PCB congener Analysis) from Fish Collected August 14th and 15th,
2001 on the North fork Feather River**

Fish Tissue Samples (PCB Congener Analysis) from Fish Collected August 14th and 15th, 2001 on the North Fork Feather River.

		PCB Congener Concentration (pg/g; parts per trillion)																
		V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD2	V4991AD1	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD2
		S4	S5	S6	S7	S8	S9	S10	S11	S3	S13	S3	S4	S5	S8	S7	S8	S4
		L3739-1	L3739-2	L3739-3	L3739-4	L3739-5	L3739-6	L3739-7	L3739-8	L3739-9	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14	L3739-15	L3739-16	L3739-17
IUPAC NO.	CO-ELUTIONS	BR1 RT1	BR1 RT2	BR1 RT3	BR1 RT4	BR1 SS1	BR1 SS2	BR1 SS3	BR1 SS4	BR1 CF1	CA1 RT1	CA1 BT1	CA1 SS1	CA1 SS2	CA1 SS3	CA1 SB1	CA1 SB2	CA1 CF1 AND CF2
1		0.483	0.402	0.687	0.425	0.499	0.441	0.409	2.46	0.401	0.665	0.475	0.79	1.38	0.409	0.376	0.456	0.475
2		0.161	0.175	0.213	0.148	0.18	0.185	0.173	0.202	0.172	0.172	0.19	0.206	0.23	0.162	0.19	0.164	0.233
3		0.37	0.347	0.522	0.384	0.373	0.342	0.368	1.02	0.422	0.573	0.446	0.49	0.786	0.344	0.338	0.422	0.45
4		1.11	1.37	2.04	1.28	1.14	1.39	1.23	6.11	0.451	1.68	1.26	2.57	3.17	0.89	0.948	1.14	0.984
5																		
6		0.467	0.5	0.754	0.515	0.398	0.547	0.596	1.3	0.275	0.744	0.654	1.47	0.982	0.446	0.453	0.561	0.774
7								0.153									0.128	
8		2.56	2.56	3.1	2.03	1.66	2.29	2.59	3.57	0.735	2.54	2.96	3.53	3.64	2.17	1.99	2.17	1.12
9				0.318	0.219			0.221	0.244		0.21			0.208	0.181	0.159	0.145	
10								0.253										
11		2.12	2.21	3.29	1.66	1.72	1.67	1.89	1.37	1.6	6	2.88	1.98	1.74	1.88	2.06	1.89	4.13
12	12 + 13			0.459					2.25	0.242	0.418		0.615	1.13		0.219	0.226	0.411
13	12 + 13																	
14																		
15		0.942	1.01	1.37	0.667	0.931	1.27	1.2	3.63	0.777	1.38	1.5	1.52	2.6	1.03	0.956	0.959	0.884
16		2.18	2.02	2.2	1.5	1.62	2.73	3.36	1.54	0.272	1.59	1.26	3.64	3.61	2.6	2.03	2.06	0.282
17		4.51	4.91	4.92	4.59	2.31	4.46	4.92	8.19	0.38	2.75	3.24	7.26	8.97	4.67	2.43	2.51	0.608
18	18 + 30	9.3	9.31	8.66	8.65	5.43	8.97	10.7	5.31	0.646	5.28	8.08	13.6	11.7	8.5	5.78	5.67	1.22
19		0.676	0.521	1.05	0.566	0.513	0.909	0.745	2.93	0.155	0.655	0.6	1.2	1.98	0.547	0.491	0.504	0.262
20	20 + 28	40.1	42.5	38.7	44.3	18.3	30.7	32	13.1	1.9	16.3	35	64.8	64.3	59.8	22.5	21.3	3.46
21	21 + 33	5.02	4.27	5.06	2.27	3.82	6.77	6.73	3.37	0.59	3.43	6.03	13.1	13.1	10.6	4.71	4.52	0.635
22		5.39	5.11	5.5	4.21	3.26	6.42	6.24	2.98	0.45	3.49	7.26	12.9	12.3	11.2	4.67	4.43	0.567
23														0.056			0.031	
24		0.171	0.111	0.12	0.108	0.087	0.115	0.151	0.202		0.109	0.131	0.154	0.161	0.115	0.103	0.098	
25		1.25	1.5	1.69	1.28	0.569	1.13	1.08	2.65	0.154	1.13	1.62	2.28	2.78	1.35	0.922	0.984	0.425
26	26 + 29	3.81	4.2	4.49	4.22	1.69	3.28	3.48	4.88	0.464	2.58	3.94	6.01	6.99	4.19	2.54	2.4	0.88
27		0.737	0.681	0.932	0.496	0.428	0.781	0.901	2.68	0.057	0.575	0.743	1.26	1.94	0.692	0.494	0.476	0.147
28	20 + 28																	
29	26 + 29																	
30	18 + 30																	
31		30.1	32.4	29.4	32.2	11.6	21.7	25	15.5	1.27	12.4	25.6	45.2	46.9	41.2	15.4	12.9	2.32
32		1.81	1.99	2.4	1.87	0.864	1.53	1.58	4.53	0.287	1.72	1.52	3.38	4.24	2.25	1.13	1.21	0.405
33	21 + 33																	
34			0.107	0.104			0.134	0.17	0.223				0.679	0.685	0.473	0.077	0.105	
35										0.043	0.097							0.461
36											0.067							
37		4.1	4.39	3.63	2.4	1.86	3.05	3.18	1.36	1.09	2.4	3.46	4.58	4.61	5.12	2.03	1.82	0.951
38											0.081		0.136	0.124	0.093			
39		0.407	0.501	0.482	0.461	0.16	0.469	0.318	0.16	0.041	0.096	0.194	0.895	0.824	0.629	0.066	0.122	
40	40 + 41 + 71	15.4	14.4	13.8	12.1	11.5	18.3	17.3	8.57	0.429	5.21	11.8	63.5	75.1	47.5	7.8	8.01	0.51
41	40 + 41 + 71																	

PCB Congener Concentration (pg/g; parts per trillion)

IUPAC NO.	CO-ELUTIONS	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD2	V4991AD1	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD2
		S4	S5	S6	S7	S8	S9	S10	S11	S3	S13	S3	S4	S5	S6	S7	S8	S4
		L3739-1	L3739-2	L3739-3	L3739-4	L3739-5	L3739-6	L3739-7	L3739-8	L3739-9	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14	L3739-15	L3739-16	L3739-17
		BR1 RT1	BR1 RT2	BR1 RT3	BR1 RT4	BR1 SS1	BR1 SS2	BR1 SS3	BR1 SS4	BR1 CF1	CA1 RT1	CA1 BT1	CA1 SS1	CA1 SS2	CA1 SS3	CA1 SB1	CA1 SB2	CA1 CF1 AND CF2
42		9.05	9.28	5.92	5.96		11.1	10.6	5.36	0.17	2.37	16.5	39.4	48.5	36.7	6.5	8.46	0.32
43			1.75	1.53	1.37	0.891	1.86	1.39	1.05	0.039	0.704	2.15	6.07	6.21	3.64	0.827	1.56	
44	44 + 47 + 65	60.9	57.7	55.6	63.5	41.5	62.7	59.4	27.3	0.985	19.5	75	156	192	137	41.9	47.5	1.79
45	45 + 51	3.31	3.24	3.63	3.1	2.39	3.86	3.89	4.21	0.155	1.78	2.18	9.18	10.3	5.41	1.69	1.78	0.206
46		0.837	0.777	0.716	0.451	0.648	1.03	1.05	0.776		0.407	0.236	2.23	2.24	1.24	0.444	0.443	
47	44 + 47 + 65																	
48			10.1	10.1	10.8	7.37	10.4	10.3	4.07	0.115	3.31	2.03	30.1	36.3	19.9	3.9	4.28	0.236
49	49 + 69	46.7	44.1	43.9	49.7	33.9	48.2	48	21.5	0.429	15.1	74	117	142	114	36.4	39.1	1.05
50	50 + 53	3.88	3.63	3.41	2.99	2.31	3.99	3.96	3.71	0.082	1.61	2.69	9.37	10.5	5.22	1.47	1.5	0.172
51	45 + 51																	
52		118	114	111	127	77.5	120	117	47.1	1.79	39.3	127	204	226	166	67	86.8	3.52
53	50 + 53																	
54				0.052					0.123				0.079	0.086	0.03			
55																		
56		13	9.46	10.2	7.47	19.8	28.2	24.5	8.69	0.299	3.31	30.5	115	126	115	18.6	17	0.68
57																		
58																		
59	59 + 62 + 75	5.3	4.99	5.04	5.69	3.28	5.28	5.14	2.74	0.062	1.89	7.16	12.8	16.2	11.8	3.76	3.68	0.138
60		45.4	44.4	44.8	51	38.4	41.9	33.8	10.6	0.6	11.6	80.3	89.8	106	99.5	39.9	32.5	1.37
61	61 + 70 + 74 + 76	234	238	232	270	185	223	200	68.2	8.3	82.6	460	604	729	671	192	167	9.7
62	59 + 62 + 75																	
63		7.02	8.25	7.7	8.6	6.4	7.82	6.61	2.68	0.806	2.6	15.7	19.2	24.7	23.1	7.75	6.24	0.736
64		34.4	33.5	33.5	39.6	21.8	32.6	32	14.2	0.336	12.1	48.9	83.1	93.7	83.6	20.4	21.9	0.629
65	44 + 47 + 65																	
66		178	175	172	205	148	163	139	50.7	8.66	53	371	432	505	487	177	154	9.65
67			1.99	1.55				0.964	0.388		0.747	2.74	2.53	2.39	2.87		1.34	
68			1.89	1.36	2.17	1.51	1.46	1.25	0.495	0.185	0.602	2.33	2.83	3.2	3.21	1.12		0.158
69	49 + 69																	
70	61 + 70 + 74 + 76																	
71	40 + 41 + 71																	
72			1.6	1.26	1.92	1.81	1.66	1.27	0.674	0.042	0.537	2.81	3.67	4.08	3.82	1.26	1.28	
73		1.03															1.03	0.031
74	61 + 70 + 74 + 76																	
75	59 + 62 + 75																	
76	61 + 70 + 74 + 76																	
77		12.4	12.3	11.9	11	7.58	9.78	8.48	2.84	1.57	5.01	14.3	14.9	15.7	18.2	7.28	9.47	1.49
78																		
79		1.7	2.02		4.99	2.8	2.38	1.39	0.854	0.094	0.425	3.18	4.95	6.32	5.14	1.24	3.52	0.14
80																		
81								0.755		0.05	0.312				1.27			
82		9.83	8.51	4.59	7.3	17.2	21.1	18.1	5.99	0.063	0.748	28.9	53.5	77.2	62.7	9.8	25.4	0.214
83	83 + 99	194	175	177	230	242	214	170	75.7	4.15	78	394	379	566	441	200	342	7.81
84		12.9	12.2	8.88	9.71	16.5	24.2	22.2	9.78	0.226	2.13	12.9	42.7	50.8	32.2	10	24.1	0.391

PCB Congener Concentration (pg/g; parts per trillion)

IUPAC NO.	CO-ELUTIONS	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD2	V4991AD1	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD2
		S4	S5	S6	S7	S8	S9	S10	S11	S3	S13	S3	S4	S5	S6	S7	S8	S4
		L3739-1	L3739-2	L3739-3	L3739-4	L3739-5	L3739-6	L3739-7	L3739-8	L3739-9	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14	L3739-15	L3739-16	L3739-17
		BR1 RT1	BR1 RT2	BR1 RT3	BR1 RT4	BR1 SS1	BR1 SS2	BR1 SS3	BR1 SS4	BR1 CF1	CA1 RT1	CA1 BT1	CA1 SS1	CA1 SS2	CA1 SS3	CA1 SB1	CA1 SB2	CA1 CF1 AND CF2
85	85 + 116 + 117	66.7	62.2	63.4	82.6	80.5	70	53.2	23.8	1.17	23.2	154	155	228	179	77.4	112	2.23
86	+ 125	121	104	98.1	131	156	156	123	48.6	0.801	28	342	456	639	508	136	436	2.38
87	+ 125																	
88	88 + 91	19.2	17.5	15.6	19.6	23.6	26.1	21.9	11.6	0.131	4.63	33	44	58.5	43	11.4	34.1	0.401
89		1.15	0.979	1.02	1.05	1.33	1.52	1.42	0.587		0.205	1.23	4.63	5.61	3.09	0.31	0.58	
90	90 + 101 + 113	265	232	229	299	332	327	250	105	1.87	94.5	418	444	582	487	168	539	5.09
91	88 + 91																	
92		39.4	34.7	34.8	47.2	44.2	47.9	37.1	20.2	0.291	15.7	63.8	76	99.4	74	30	89.1	0.85
93	93 + 95 + 98 + 100 + 102	99.9	87.3	89.5	109	83.7	119	101	42.1	0.814	32.3	115	176	207	141	52.7	203	2.11
94		0.324	0.46	0.495	0.416	0.319	0.339	0.393	0.862				1.19	1.74	0.666	0.101	0.173	
95	93 + 95 + 98 + 100 + 102																	
96		0.173	0.057	0.128	0.09	0.334	0.488	0.482	0.386				1.29	1.58	0.734	0.139	0.202	
97	+ 125																	
98	93 + 95 + 98 + 100 + 102																	
99	83 + 99																	
100	93 + 95 + 98 + 100 + 102																	
101	90 + 101 + 113																	
102	93 + 95 + 98 + 100 + 102																	
103		1.28	1.29	1.19	1.54	1.31	1.37	1.24	0.734		0.454	1.96	3.01	4.22	2.52	0.826	1.71	0.034
104					0.041								0.035	0.023				
105		135	127	125	150	159	134	97.2	38	3.31	55.8	284	227	272	288	142	215	6.25
106																		
107	107 + 124	11	9.67	9.32	10.9	13.9	11.8	8.44	3.82	0.148	4.46	20.4	22.5	26.3	27.9	8.68	10.8	0.349
108	+ 125																	
109		31.1	31.2	29.9	38.8	43	33.1	22.8	9.95	3.22	11.7	66.4	59.9	77.1	72.5	29.4	48.2	3.46
110	110 + 115	226	198	193	265	250	252	190	76.8	0.926	70.6	341	378	453	429	137	381	2.8
111		0.336	0.205	0.265	0.428	0.331	0.231	0.238	0.14	0.067	0.225	0.876	0.593	0.599	0.463	0.401	0.626	
112																		
113	90 + 101 + 113																	
114		9.36	9.15	8.47	10.6	12.2	9.98	6.89	3.17	1.19	4.01	23.5	20.8	27.5	24.8	12.1	14.7	1.59
115	110 + 115																	
116	85 + 116 + 117																	
117	85 + 116 + 117																	
118		288	262	258	326	363	302	216	89.1	27.4	154	645	551	733	683	324	551	30.7
119	+ 125																	
120		2.12	1.96	2.07	2.88	2.88	2.1	1.61	0.725	0.235	1.04	4.1	3.23	4.25	3.61	2.34	4.46	0.222
121		0.388	0.392	0.244	0.396	0.352		0.239	0.11			0.4	0.353	0.416	0.254	0.23		
122		1.67	1.07		1.98		2.9	1.99	0.812			3.68	8.26	9.33	8.36	1.97	2.76	0.134
123		7.68	7.72	7.47	8.89	11.4	10.5	8.13	3.42	1	4.33	20	16.4	20.7	21.6	10.1	12.5	1.28
124	107 + 124																	
125	+ 125																	
126		1.26	1.26	1.09	1.55			0.977	0.449		1.21	2.58	1.34		1.72	1.32	6.24	
127			0.538															

PCB Congener Concentration (pg/g; parts per trillion)

IUPAC NO.	CO-ELUTIONS	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD2	V4991AD1	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD2
		S4	S5	S6	S7	S8	S9	S10	S11	S3	S13	S3	S4	S5	S6	S7	S8	S4
		L3739-1	L3739-2	L3739-3	L3739-4	L3739-5	L3739-6	L3739-7	L3739-8	L3739-9	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14	L3739-15	L3739-16	L3739-17
		BR1 RT1	BR1 RT2	BR1 RT3	BR1 RT4	BR1 SS1	BR1 SS2	BR1 SS3	BR1 SS4	BR1 CF1	CA1 RT1	CA1 BT1	CA1 SS1	CA1 SS2	CA1 SS3	CA1 SB1	CA1 SB2	CA1 CF1 AND CF2
128	128 + 166	58	55.7	54.8	75.4	82.6	64.6	39.1	19.2	1.22	31.3	107	100	148	135	69.9	174	6.58
129	129 + 138 + 160 + 163	421	399	400	581	638	494	325	162	14.7	240	792	752	1070	980	496	1360	53.5
130		24.7	28.2	22.1	31.3	23.5	27.7	18.6	9.39	0.805	8.43	45.5	43.9	61.4	58.6	20.4	83.3	2.78
131						2.97	2.23	1.83				2.4	3.8	5.95	3.83	1.24		
132		50.4	50.5	37.1	52.7	73.3	74.2	56.5	24.7	0.284	6.47	74.2	100	123	106	29.6	140	3.12
133		8.69	9.06	8.54	12.1	12.6	10.3	7.31	3.97	0.692	5.35	17.8	15.6	21	20.1	10.9	30.7	1.81
134	134 + 143	5.9	5.34	5.95	6.78	7.09	8.07	5.91	3.14		1.71	12	19.4	24.5	15.6	5.45	18.2	0.907
135	135 + 151 + 154	83	81.9	84.6	116	113	115	92.1	43.6	0.978	32.3	135	215	262	183	80.2	276	14.4
136		11.5	10.8	10.3	12	18.5	22.7	19.9	8.05		2.56	16.6	38.6	44.7	27.7	9.64	27.4	
137		16.4	13.7	14.2	20.4	22	16.4	9.72	5.77	1.72	10.2	37.9	29.4	48.7	41.1	23.7	45	3.51
138	129 + 138 + 160 + 163																	
139	139 + 140	5.05	5.1	5.03	6.61	7.59	5.2	3.73	1.96	0.092	2.16	10.9	9.74	15.5	11	6.15	14	
140	139 + 140																	
141		51.5	48.6	49.2	67.1	88.9	69	46.1	22.5		28.4	100	99	128	115	53.1	184	2.31
142																		
143	134 + 143																	
144		11.9	11.1	10.6	16	18.7	16	12.5	5.68	0.135	3.49	17.2	23.9	34.7	25.2	8.54	41.7	1.39
145					0.052	0.124	0.11		0.038				0.098			0.027		
146		97.2	99.4	94.1	133	160	117	81.2	42.5	9.38	51.1	167	149	205	200	93.3	301	20.3
147	147 + 149	230	222	197	277	279	275	203	97.9	1.69	51.1	292	352	400	349	123	527	16.9
148		0.592	0.694	0.645	0.859	0.906	0.598	0.581	0.388		0.35	0.956	0.982	1.64	1.2	0.435	1.23	
149	147 + 149																	
150		0.3	0.302	0.266	0.398	0.443	0.487	0.329	0.341			0.364	0.522	0.829	0.553	0.178	0.67	
151	135 + 151 + 154																	
152			0.068	0.078	0.037	0.151	0.19	0.162	0.069		0.059		0.398	0.332	0.223		0.204	
153	153 + 168	480	487	479	669	826	589	385	211	34.6	338	952	811	1160	1010	678	1350	66.7
154	135 + 151 + 154																	
155		0.535	0.552	0.356	0.74	0.456	0.447	0.241	0.208		0.107	0.812	0.519	0.756	0.479	0.389	0.418	
156	156 + 157	32.2	28.4	28.3	37.5	45.8	33.6	21.7	10.2	2.78	27.2	58.7	47.2	61.6	64.6	39.8	105	6.75
157	156 + 157																	
158		31	30.4	30	41.8	50.6	38.7	25.6	11.6	0.308	20.2	60.4	58.7	82.8	78.3	41.3	113	2.13
159		2.65	2.65	2.55	3.41	3.85	3.38	2.65	1		0.96	4	4.72	4.63	4.97	1.89	9.34	0.732
160	129 + 138 + 160 + 163																	
161																		
162		2.19	2.06	1.91	2.35	3.73	2.19	1.31	0.623	0.336	1.38	4.82	2.74	3.89	3.94	3.46	14.5	1.29
163	129 + 138 + 160 + 163																	
164		23.9	22	21.5	28.7	31.8	28.7	19.7	7.92	0.288	9.53	31.2	33.6	33.3	39.4	16.1	51	2.16
165																		
166	128 + 166																	
167		17.6	15.3	14.1	20.1	27.4	18.8	12.4	8.29	1.69	13.7	28.4	24.6	33.5	34.5	18.5	80.2	3.7
168	153 + 168																	
169											0.392					0.795	2.11	
170		111	100	109	141	188	146	92.2	48.6	3.8	66.1	193	215	308	326	174	601	27.7

PCB Cong. Concentration (pg/g; parts per trillion)

IUPAC NO.	CO-ELUTIONS	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD1	V4991AD2	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD3	V4991AD2
		S4	S5	S6	S7	S8	S9	S10	S11	S3	S13	S3	S4	S5	S6	S7	S8	S4
		L3739-1	L3739-2	L3739-3	L3739-4	L3739-5	L3739-6	L3739-7	L3739-8	L3739-9	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14	L3739-15	L3739-16	L3739-17
		BR1 RT1	BR1 RT2	BR1 RT3	BR1 RT4	BR1 SS1	BR1 SS2	BR1 SS3	BR1 SS4	BR1 CF1	CA1 RT1	CA1 BT1	CA1 SS1	CA1 SS2	CA1 SS3	CA1 SB1	CA1 SB2	CA1 CF1 AND CF2
171	171 + 173	31.7	27.2	26.9	37.8	49.4	41	25.5	14.1	0.55	14.4	55.8	64.1	99.1	95.8	46.8	140	4.44
172		29.1	27.5	27.9	38.6	52.8	37	22.7	13.2	0.915	17.9	49.4	50.2	74.2	80.1	35.9	188	5.28
173	171 + 173																	
174		76.2	66.7	62.7	84.9	90.7	88.3	62.2	30.5		20	80.4	105	120	130	43.7	213	14.3
175		5.92	5.4	5.24	7.3	8.43	7.15	4.63	2.32	0.229	3.03	8.64	9.46	15.4	15.7	5.28	29.9	1.46
176		5.42	5.51	4.38	6.42	13	12.5	9.16	4.66	0.087	0.982	11	17.7	26.5	19.1	5.72	26.9	1.41
177		75	72.9	65.2	94.8	72.5	82.7	53.1	29	2.33	27.5	107	141	203	198	55.5	301	20.1
178		35.1	32.4	30.3	43.9	50.4	40.1	28.6	14.3	0.843	19.1	55.9	66.9	103	91.9	40.1	158	9.08
179		21.3	19.4	19.2	25.3	35.5	37.4	27.5	14.2		4.87	26	90.2	96.1	65.3	18.1	79.2	3.02
180	180 + 193	331	305	311	432	581	418	253	157	24.5	210	580	569	840	857	511	1490	118
181		1.01	0.758	1	1.37	1.51	1.13	0.764	0.532	0.078	0.38	1.69	1.74	2.42	2.37	1.37	3.21	
182		2.94										3.16						
183	183 + 185	107	94.3	90.6	131	173	132	82	48.3	3.77	53.2	186	199	313	277	138	419	24.7
184		0.857	0.747	0.608	1	1.11	0.678	0.461	0.263		0.354	1.45	1.03	1.83	1.09	0.971	1.58	
185	183 + 185																	
186																		
187		243	229	216	325	402	297	182	118	20.2	113	357	441	644	610	241	961	96.6
188		0.568	0.659	0.56	0.731	0.885	0.788	0.443	0.265		0.169	0.814	1.32	1.71	1.25	0.418	1.57	0.102
189		3.3	3.18	2.72	3.97	5.79	3.79	2.64	1.51	0.359	2.26	6.38	5.74	7.45	8.75	5.81	20	1.52
190		26.4	21.6	23.8	29.1	38.7	30.5	17.3	9.61	1.24	12.4	40.5	42	57.7	59.5	37.6	130	6.89
191		5.04	4.37	4.39	6.42	8.76	6.55	3.8	2.01	0.385	2.87	8.63	8.83	13	13.9	7.58	32	1.64
192		0.082									0.067							
193	180 + 193																	
194		42.3	47.7	46	57.9	72.3	52.2	39.7	25.9	3.18	34.4	100	101	136	154	88.4	241	17.5
195		14	14.8	14.2	18.3	22.2	17.5	13	8.15	1.07	7.64	35.9	40.3	56.8	61.2	33.1	89.7	7.49
196		24.2	23	24.4	30.6	34.6	29.3	22	12.4	1.83	18.1	53.2	54.4	88.6	93.2	45.3	156	9.77
197	197 + 200	4.65	4.4	3.6	4.71	8.18	7.58	5.91	3.57	0.177	2.13	11.7	15.2	22.1	18.5	7.9	28.3	1.72
198	198 + 199	66.7	66.6	66.1	92.3	112	81.7	61.7	35.4	4.14	46.7	123	168	250	253	85.4	402	23
199	198 + 199																	
200	197 + 200																	
201		7.12	6.96	5.96	8.38	11.5	8.49	6.62	3.49	0.532	4.33	13.1	16.1	26.6	25.9	8.36	35.6	2.72
202		13.8	15.1	13.3	18.2	20.2	17.2	13	7.3	0.213	11.8	30.6	41.1	58.3	52.3	22.5	71.1	3.14
203		48.3	48.6	49.5	61.1	80.1	55.6	41.2	26.8	1.13	29.4	94.7	109	156	162	91.4	202	6.33
204		0.18	0.159	0.134	0.185	0.246	0.121	0.08	0.082	0.04	0.202	0.33	0.371	0.445	0.367	0.263	0.386	
205		2.35	2.42	2.19	2.91	3.67	2.64	1.73	1.35	0.124	1.47	4.93	4.79	6.49	7.48	4.69	16.6	0.61
206		18.4	19.1	17.7	24.8	28.9	23.2	19.7	14.5	0.686	16.2	49.7	59.4	88.1	104	44.8	80.4	3.01
207		2.55	2.82	2.29	2.87	4.49	3.5	2.98	2.1	0.347	2.1	8.29	8.74	13.4	14.8	6.86	14	1.39
208		6.34	6.95	5.68	8.15	9.76	8.69	7.32	5.17	0.429	4.88	15.6	24.6	36.9	36.8	10	25.9	1.5
209		4.16	4	4.09	5.03	7.44	6.55	6.35	5.24	0.712	4.93	16.4	20.4	30.3	42.1	14.1	11.5	1.9
Total:		5488.046	5208.89	5076.458	6893.009	7266.878	6397.888	4689.244	2308.538	230.878	2557.69	9737.621	10970.703	14600.202	13147.51	5741.436	14862.263	750.176

Section A-3

Form 1C PCB Congener TEQ Analysis Report

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.: 2001-068

Contract No.:

Lab Sample ID: L3739-1

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:24

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.85	12.4	0.0001	1.24E-03	9.25E-05
3,4,4',5-TetraCB	81		1.75		0.0001	0.00E+00	8.75E-05
2,3,3',4,4'-PentaCB	105		0.762	135	0.0001	1.35E-02	3.81E-05
2,3,4,4',5-PentaCB	114		0.809	9.36	0.0005	4.68E-03	2.02E-04
2,3',4,4',5-PentaCB	118		0.756	288	0.0001	2.88E-02	3.78E-05
2',3,4,4',5-PentaCB	123		0.793	7.68	0.0001	7.68E-04	3.97E-05
3,3',4,4',5-PentaCB	126		0.914	1.26	0.1	1.26E-01	4.57E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	0.938	32.2	0.0005	1.61E-02	2.35E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.748	17.6	0.00001	1.76E-04	3.74E-06
3,3',4,4',5,5'-HexaCB	169		0.882		0.01	0.00E+00	4.41E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0208	3.30	0.0001	3.30E-04	1.04E-06
TOTAL TEQ						1.92E-01	5.08E-02

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-2

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:28

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.47	12.3	0.0001	1.23E-03	7.35E-05
3,4,4',5-TetraCB	81		1.53		0.0001	0.00E+00	7.65E-05
2,3,3',4,4'-PentaCB	105		0.407	127	0.0001	1.27E-02	2.04E-05
2,3,4,4',5-PentaCB	114		0.429	9.15	0.0005	4.58E-03	1.07E-04
2,3',4,4',5-PentaCB	118		0.428	262	0.0001	2.62E-02	2.14E-05
2',3,4,4',5-PentaCB	123		0.441	7.72	0.0001	7.72E-04	2.21E-05
3,3',4,4',5-PentaCB	126		0.491	1.26	0.1	4.91E-02	2.46E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.28	28.4	0.0005	1.42E-02	3.20E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.02	15.3	0.00001	1.53E-04	5.10E-06
3,3',4,4',5,5'-HexaCB	169		1.17		0.01	0.00E+00	5.85E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0167	3.18	0.0001	3.18E-04	8.35E-07
TOTAL TEQ						0.109248	0.031046985

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.: 2001-068

Contract No.:

Lab Sample ID: L3739-3

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:29

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.995	11.9	0.0001	1.19E-03	4.98E-05
3,4,4',5-TetraCB	81			1.03	0.0001	1.03E-04	0.00E+00
2,3,3',4,4'-PentaCB	105		0.695	125	0.0001	1.25E-02	3.48E-05
2,3,4,4',5-PentaCB	114		0.722	8.47	0.0005	4.24E-03	1.81E-04
2,3',4,4',5-PentaCB	118		0.709	258	0.0001	2.58E-02	3.55E-05
2',3,4,4',5-PentaCB	123		0.749	7.47	0.0001	7.47E-04	3.75E-05
3,3',4,4',5-PentaCB	126		0.800	1.09	0.1	1.09E-01	4.00E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.13	26.3	0.0005	1.32E-02	2.83E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.913	14.1	0.00001	1.41E-04	4.57E-06
3,3',4,4',5,5'-HexaCB	169		0.983		0.01	0.00E+00	4.92E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0465	2.72	0.0001	2.72E-04	2.33E-06
TOTAL TEQ						0.167138	0.04554229

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-4

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:30

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.26	11.0	0.0001	1.10E-03	6.30E-05
3,4,4',5-TetraCB	81		1.23		0.0001	0.00E+00	6.15E-05
2,3,3',4,4'-PentaCB	105		0.694	150	0.0001	1.50E-02	3.47E-05
2,3,4,4',5-PentaCB	114		0.742	10.6	0.0005	5.30E-03	1.86E-04
2,3',4,4',5-PentaCB	118		0.718	326	0.0001	3.26E-02	3.59E-05
2',3,4,4',5-PentaCB	123		0.748	8.89	0.0001	8.89E-04	3.74E-05
3,3',4,4',5-PentaCB	126		0.812	1.55	0.1	1.55E-01	4.06E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.88	37.5	0.0005	1.88E-02	4.70E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.50	20.1	0.00001	2.01E-04	7.50E-06
3,3',4,4',5,5'-HexaCB	169		1.70		0.01	0.00E+00	8.50E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0732	3.97	0.0001	3.97E-04	3.66E-06
TOTAL TEQ						0.229237	0.04999916

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-5

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:31

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.00	7.58	0.0001	7.58E-04	5.00E-05
3,4,4',5-TetraCB	81		1.03		0.0001	0.00E+00	5.15E-05
2,3,3',4,4'-PentaCB	105		0.978	159	0.0001	1.59E-02	4.89E-05
2,3,4,4',5-PentaCB	114		1.02	12.2	0.0005	6.10E-03	2.55E-04
2,3',4,4',5-PentaCB	118		0.973	363	0.0001	3.63E-02	4.87E-05
2',3,4,4',5-PentaCB	123		1.03	11.4	0.0001	1.14E-03	5.15E-05
3,3',4,4',5-PentaCB	126		1.17		0.1	0.00E+00	5.85E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.62	45.8	0.0005	2.29E-02	4.05E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.32	27.4	0.00001	2.74E-04	6.60E-06
3,3',4,4',5,5'-HexaCB	169		1.50		0.01	0.00E+00	7.50E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.119	5.79	0.0001	5.79E-04	5.95E-06
TOTAL TEQ						0.083951	0.0669231

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-6

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:32

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.05	9.78	0.0001	9.78E-04	5.25E-05
3,4,4',5-TetraCB	81		1.03		0.0001	0.00E+00	5.15E-05
2,3,3',4,4'-PentaCB	105		1.05	134	0.0001	1.34E-02	5.25E-05
2,3,4,4',5-PentaCB	114		1.17	9.98	0.0005	4.99E-03	2.93E-04
2,3',4,4',5-PentaCB	118		1.11	302	0.0001	3.02E-02	5.55E-05
2',3,4,4',5-PentaCB	123		1.16	10.5	0.0001	1.05E-03	5.80E-05
3,3',4,4',5-PentaCB	126		1.26		0.1	0.00E+00	6.30E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.20	33.6	0.0005	1.68E-02	3.00E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.913	14.1	0.00001	1.41E-04	4.57E-06
3,3',4,4',5,5'-HexaCB	169		0.983		0.01	0.00E+00	4.92E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0465	2.72	0.0001	2.72E-04	2.33E-06
TOTAL TEQ						0.067831	0.06878439

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.: 2001-068

Contract No.:

Lab Sample ID: L3739-7

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:33

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.667	8.48	0.0001	8.48E-04	3.34E-05
3,4,4',5-TetraCB	81		0.621	0.755	0.0001	7.55E-05	3.11E-05
2,3,3',4,4'-PentaCB	105		0.592	97.2	0.0001	9.72E-03	2.96E-05
2,3,4,4',5-PentaCB	114		0.618	6.89	0.0005	3.45E-03	1.55E-04
2,3',4,4',5-PentaCB	118		0.617	216	0.0001	2.16E-02	3.09E-05
2',3,4,4',5-PentaCB	123		0.636	8.13	0.0001	8.13E-04	3.18E-05
3,3',4,4',5-PentaCB	126		0.702	0.977	0.1	9.77E-02	3.51E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.02	21.7	0.0005	1.09E-02	2.55E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.837	12.4	0.00001	1.24E-04	4.19E-06
3,3',4,4',5,5'-HexaCB	169		0.919		0.01	0.00E+00	4.60E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0353	2.64	0.0001	2.64E-04	1.77E-06
TOTAL TEQ						0.1454395	0.0402671

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:

Contract No.:

Lab Sample ID: L3739-8

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:34

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.331	2.84	0.0001	2.84E-04	1.66E-05
3,4,4',5-TetraCB	81		0.320		0.0001	0.00E+00	1.60E-05
2,3,3',4,4'-PentaCB	105		0.385	36.0	0.0001	3.60E-03	1.93E-05
2,3,4,4',5-PentaCB	114		0.382	3.17	0.0005	1.59E-03	9.55E-05
2,3',4,4',5-PentaCB	118		0.392	89.1	0.0001	8.91E-03	1.96E-05
2',3,4,4',5-PentaCB	123		0.399	3.42	0.0001	3.42E-04	2.00E-05
3,3',4,4',5-PentaCB	126		0.445	0.449	0.1	4.49E-02	2.23E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	0.636	10.2	0.0005	5.10E-03	1.59E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.507	6.29	0.00001	6.29E-05	2.54E-06
3,3',4,4',5,5'-HexaCB	169		0.569		0.01	0.00E+00	2.85E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0174	1.51	0.0001	1.51E-04	8.70E-07
TOTAL TEQ						0.0649349	0.025444255

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:

Contract No.:

Lab Sample ID: L3739-9 i

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:22

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.0399	1.57	0.0001	1.57E-04	2.00E-06
3,4,4',5-TetraCB	81		0.0399	0.050	0.0001	5.00E-06	2.00E-06
2,3,3',4,4'-PentaCB	105		0.0644	3.31	0.0001	3.31E-04	3.22E-06
2,3,4,4',5-PentaCB	114		0.0687	1.19	0.0005	5.95E-04	1.72E-05
2,3',4,4',5-PentaCB	118		0.0690	27.4	0.0001	2.74E-03	3.45E-06
2',3,4,4',5-PentaCB	123		0.0688	1.00	0.0001	1.00E-04	3.44E-06
3,3',4,4',5-PentaCB	126		0.0736		0.1	0.00E+00	3.68E-03
2,3,3',4,4',5-HexaCB	156	156 + 157	2.78	0.0635	0.0005	3.18E-05	6.95E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.0512	1.69	0.00001	1.69E-05	2.56E-07
3,3',4,4',5,5'-HexaCB	169		0.0551		0.01	0.00E+00	2.76E-04
2,3,3',4,4',5,5'-HeptaCB	189		0.0105	0.359	0.0001	3.59E-05	5.25E-07
TOTAL TEQ						0.00401255	0.004682556

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-10

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_210 S:36

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.230	5.01	0.0001	5.01E-04	1.15E-05
3,4,4',5-TetraCB	81		0.215	0.312	0.0001	3.12E-05	1.08E-05
2,3,3',4,4'-PentaCB	105		0.461	55.8	0.0001	5.58E-03	2.31E-05
2,3,4,4',5-PentaCB	114		0.497	4.01	0.0005	2.01E-03	1.24E-04
2,3',4,4',5-PentaCB	118		0.481	154	0.0001	1.54E-02	2.41E-05
2',3,4,4',5-PentaCB	123		0.490	4.33	0.0001	4.33E-04	2.45E-05
3,3',4,4',5-PentaCB	126		0.560	1.21	0.1	1.21E-01	2.80E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	0.383	27.2	0.0005	1.36E-02	9.58E-05
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.304	13.7	0.00001	1.37E-04	1.52E-06
3,3',4,4',5,5'-HexaCB	169		0.351	0.392	0.01	3.92E-03	1.76E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0227	2.26	0.0001	2.26E-04	1.14E-06
TOTAL TEQ						0.1628332	0.030071505

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.: 2001-068

Contract No.:

Lab Sample ID: L3739-11

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:5

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.30	14.3	0.0001	1.43E-03	6.50E-05
3,4,4',5-TetraCB	81		1.22		0.0001	0.00E+00	6.10E-05
2,3,3',4,4'-PentaCB	105		0.982	284	0.0001	2.84E-02	4.91E-05
2,3,4,4',5-PentaCB	114		1.01	23.5	0.0005	1.18E-02	2.53E-04
2,3',4,4',5-PentaCB	118		1.00	645	0.0001	6.45E-02	5.00E-05
2',3,4,4',5-PentaCB	123		1.03	20.0	0.0001	2.00E-03	5.15E-05
3,3',4,4',5-PentaCB	126		1.16	2.56	0.1	2.56E-01	5.80E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.39	58.7	0.0005	2.94E-02	3.48E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.06	28.4	0.00001	2.84E-04	5.30E-06
3,3',4,4',5,5'-HexaCB	169		1.19		0.01	0.00E+00	5.95E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0706	6.38	0.0001	6.38E-04	3.53E-06
TOTAL TEQ						0.394352	0.06483543

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-12

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:6

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.73	14.9	0.0001	1.49E-03	8.65E-05
3,4,4',5-TetraCB	81			1.67	0.0001	1.67E-04	0.00E+00
2,3,3',4,4'-PentaCB	105		0.941	227	0.0001	2.27E-02	4.71E-05
2,3,4,4',5-PentaCB	114		0.968	20.8	0.0005	1.04E-02	2.42E-04
2,3',4,4',5-PentaCB	118		0.935	551	0.0001	5.51E-02	4.68E-05
2',3,4,4',5-PentaCB	123		0.970	16.4	0.0001	1.64E-03	4.85E-05
3,3',4,4',5-PentaCB	126		1.10	1.34	0.1	1.34E-01	5.50E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.58	47.2	0.0005	2.36E-02	3.95E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.22	24.6	0.00001	2.46E-04	6.10E-06
3,3',4,4',5,5'-HexaCB	169		1.34		0.01	0.00E+00	6.70E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0752	5.74	0.0001	5.74E-04	3.76E-06
TOTAL TEQ						0.249917	0.06257566

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:

Contract No.:

Lab Sample ID: L3739-13

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:7

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.53	15.7	0.0001	1.57E-03	7.65E-05
3,4,4',5-TetraCB	81		1.48		0.0001	0.00E+00	7.40E-05
2,3,3',4,4'-PentaCB	105		1.21	272	0.0001	2.72E-02	6.05E-05
2,3,4,4',5-PentaCB	114		1.29	27.5	0.0005	1.38E-02	3.23E-04
2,3',4,4',5-PentaCB	118		1.23	733	0.0001	7.33E-02	6.15E-05
2',3,4,4',5-PentaCB	123		1.28	20.7	0.0001	2.07E-03	6.40E-05
3,3',4,4',5-PentaCB	126		1.45		0.1	0.00E+00	7.25E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.68	61.6	0.0005	3.08E-02	4.20E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.30	33.5	0.00001	3.35E-04	6.50E-06
3,3',4,4',5,5'-HexaCB	169		1.46		0.01	0.00E+00	7.30E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0704	7.45	0.0001	7.45E-04	3.52E-06
TOTAL TEQ						0.14977	0.08088902

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:

Contract No.:

Lab Sample ID: L3739-14

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:8

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.05	18.2	0.0001	1.82E-03	5.25E-05
3,4,4',5-TetraCB	81		1.06	1.27	0.0001	1.27E-04	5.30E-05
2,3,3',4,4'-PentaCB	105		0.983	288	0.0001	2.88E-02	4.92E-05
2,3,4,4',5-PentaCB	114		1.03	24.8	0.0005	1.24E-02	2.58E-04
2,3',4,4',5-PentaCB	118		0.987	683	0.0001	6.83E-02	4.94E-05
2',3,4,4',5-PentaCB	123		1.03	21.6	0.0001	2.16E-03	5.15E-05
3,3',4,4',5-PentaCB	126		1.13	1.72	0.1	1.72E-01	5.65E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	1.64	64.6	0.0005	3.23E-02	4.10E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.26	34.5	0.00001	3.45E-04	6.30E-06
3,3',4,4',5,5'-HexaCB	169		1.41		0.01	0.00E+00	7.05E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0883	8.75	0.0001	8.75E-04	4.42E-06
TOTAL TEQ						0.319127	0.064483715

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-15

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:9

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.07	7.28	0.0001	7.28E-04	5.35E-05
3,4,4',5-TetraCB	81		1.03		0.0001	0.00E+00	5.15E-05
2,3,3',4,4'-PentaCB	105		0.601	142	0.0001	1.42E-02	3.01E-05
2,3,4,4',5-PentaCB	114		0.616	12.1	0.0005	6.05E-03	1.54E-04
2,3',4,4',5-PentaCB	118		0.611	324	0.0001	3.24E-02	3.06E-05
2',3,4,4',5-PentaCB	123		0.632	10.1	0.0001	1.01E-03	3.16E-05
3,3',4,4',5-PentaCB	126		0.713	1.32	0.1	1.32E-01	3.57E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	0.906	39.8	0.0005	1.99E-02	2.27E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		0.708	18.5	0.00001	1.85E-04	3.54E-06
3,3',4,4',5,5'-HexaCB	169		0.795	0.795	0.01	7.95E-03	3.98E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0646	5.81	0.0001	5.81E-04	3.23E-06
TOTAL TEQ						0.215004	0.04020947

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-16

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:10

COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		1.16	9.47	0.0001	9.47E-04	5.80E-05
3,4,4',5-TetraCB	81		1.15		0.0001	0.00E+00	5.75E-05
2,3,3',4,4'-PentaCB	105		0.892	215	0.0001	2.15E-02	4.46E-05
2,3,4,4',5-PentaCB	114		0.955	14.7	0.0005	7.35E-03	2.39E-04
2,3',4,4',5-PentaCB	118		0.921	551	0.0001	5.51E-02	4.61E-05
2',3,4,4',5-PentaCB	123		0.943	12.5	0.0001	1.25E-03	4.72E-05
3,3',4,4',5-PentaCB	126		1.03	6.24	0.1	6.24E-01	5.15E-02
2,3,3',4,4',5-HexaCB	156	156 + 157	2.15	105	0.0005	5.25E-02	5.38E-04
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		1.71	80.2	0.00001	8.02E-04	8.55E-06
3,3',4,4',5,5'-HexaCB	169		1.89	2.11	0.01	2.11E-02	9.45E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.137	20.0	0.0001	2.00E-03	6.85E-06
TOTAL TEQ						0.786549	0.06199495

Form 1C
PCB CONGENER TEQ ANALYSIS REPORT

Lab Name: AXYS ANALYTICAL SERVICES

Project No.:2001-068

Contract No.:

Lab Sample ID: L3739-17 i

Matrix:

Sample Size: g (dry)

Sample Receipt Date:

Instrument AUTOSPEC ULTIMA

Concentration Units : ng/kg (dry weight basis)

Sample Datafile(s): PB11_211 S:23

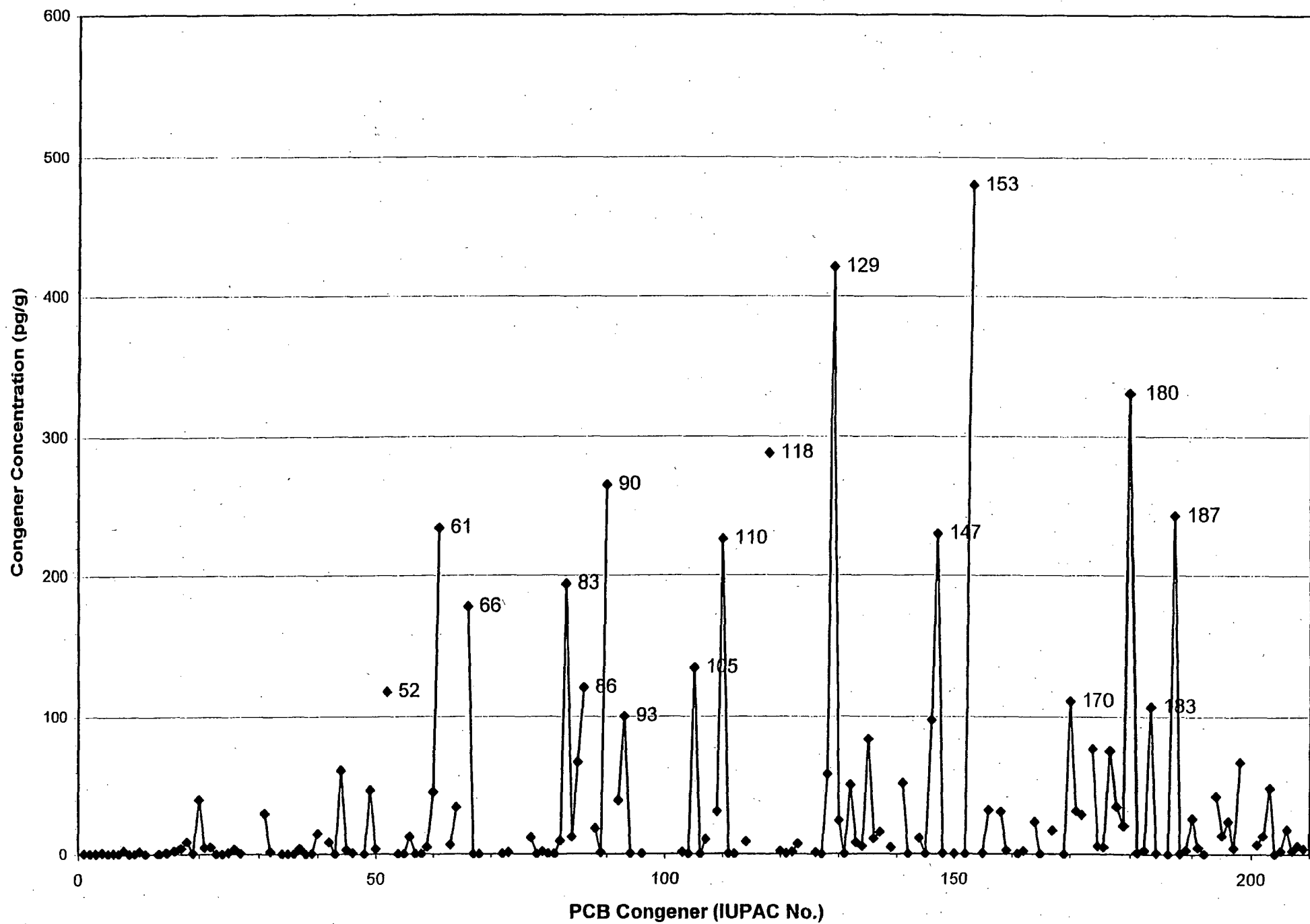
COMPOUND	IUPAC NO.	CO-ELUTIONS	DETECTION LIMIT	CONCENTRATION FOUND	WHO 1998 TEF	TEQ ND = 0 (pg/g)	TEQ ND = 1/2 DL (pg/g)
3,3',4,4'-TetraCB	77		0.115	1.49	0.0001	1.49E-04	5.75E-06
3,4,4',5-TetraCB	81		0.113		0.0001	0.00E+00	5.65E-06
2,3,3',4,4'-PentaCB	105		0.0804	6.25	0.0001	6.25E-04	4.02E-06
2,3,4,4',5-PentaCB	114		0.0809	1.59	0.0005	7.95E-04	2.02E-05
2,3',4,4',5-PentaCB	118		0.0805	30.7	0.0001	3.07E-03	4.03E-06
2',3,4,4',5-PentaCB	123		0.0822	1.28	0.0001	1.28E-04	4.11E-06
3,3',4,4',5-PentaCB	126		0.0947		0.1	0.00E+00	4.74E-03
2,3,3',4,4',5-HexaCB	156	156 + 157	0.297	6.75	0.0005	3.38E-03	7.43E-05
2,3,3',4,4',5'-HexaCB	157	156 + 157			0.0005	0.00E+00	0.00E+00
2,3',4,4',5,5'-HexaCB	167		3.70	0.233	0.00001	2.33E-06	1.85E-05
3,3',4,4',5,5'-HexaCB	169		0.267		0.01	0.00E+00	1.34E-03
2,3,3',4,4',5,5'-HeptaCB	189		0.0223	1.52	0.0001	1.52E-04	1.12E-06

TOTAL TEQ 0.00829633 0.006207645

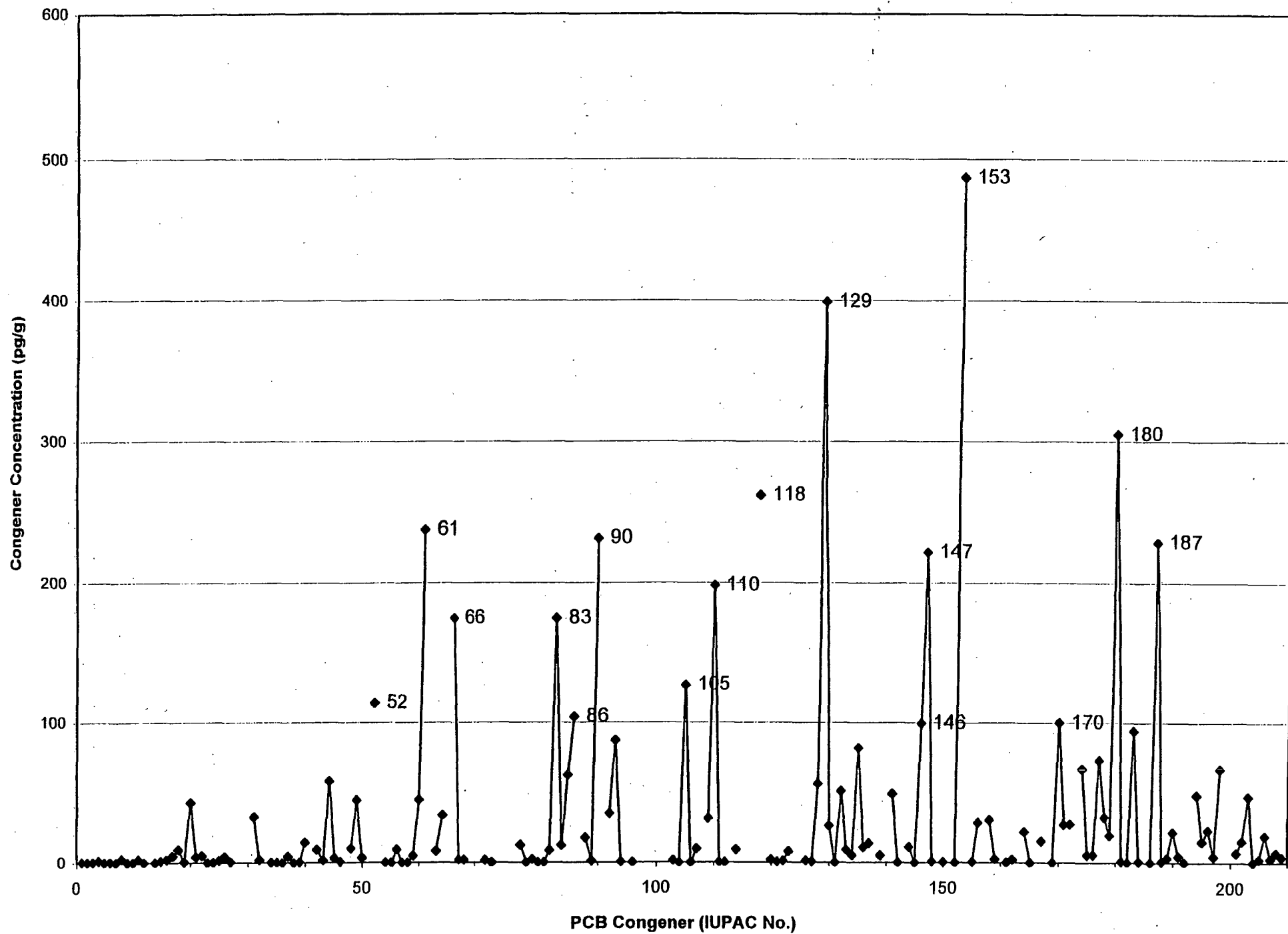
Section A-4

PCB Congener Concentration Figures

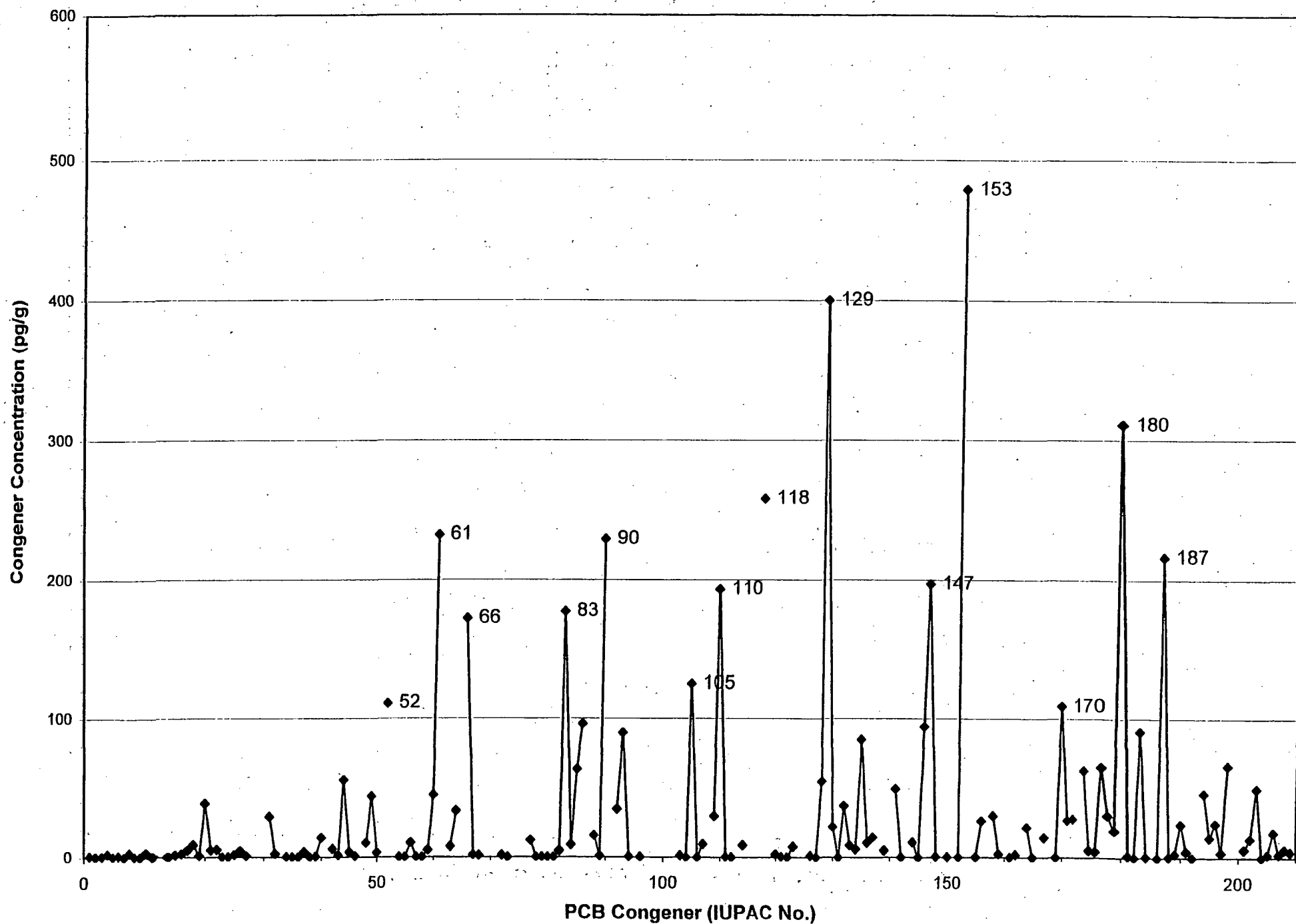
PCB Congener Concentration for Sample L3739-1, BR1 RT1.



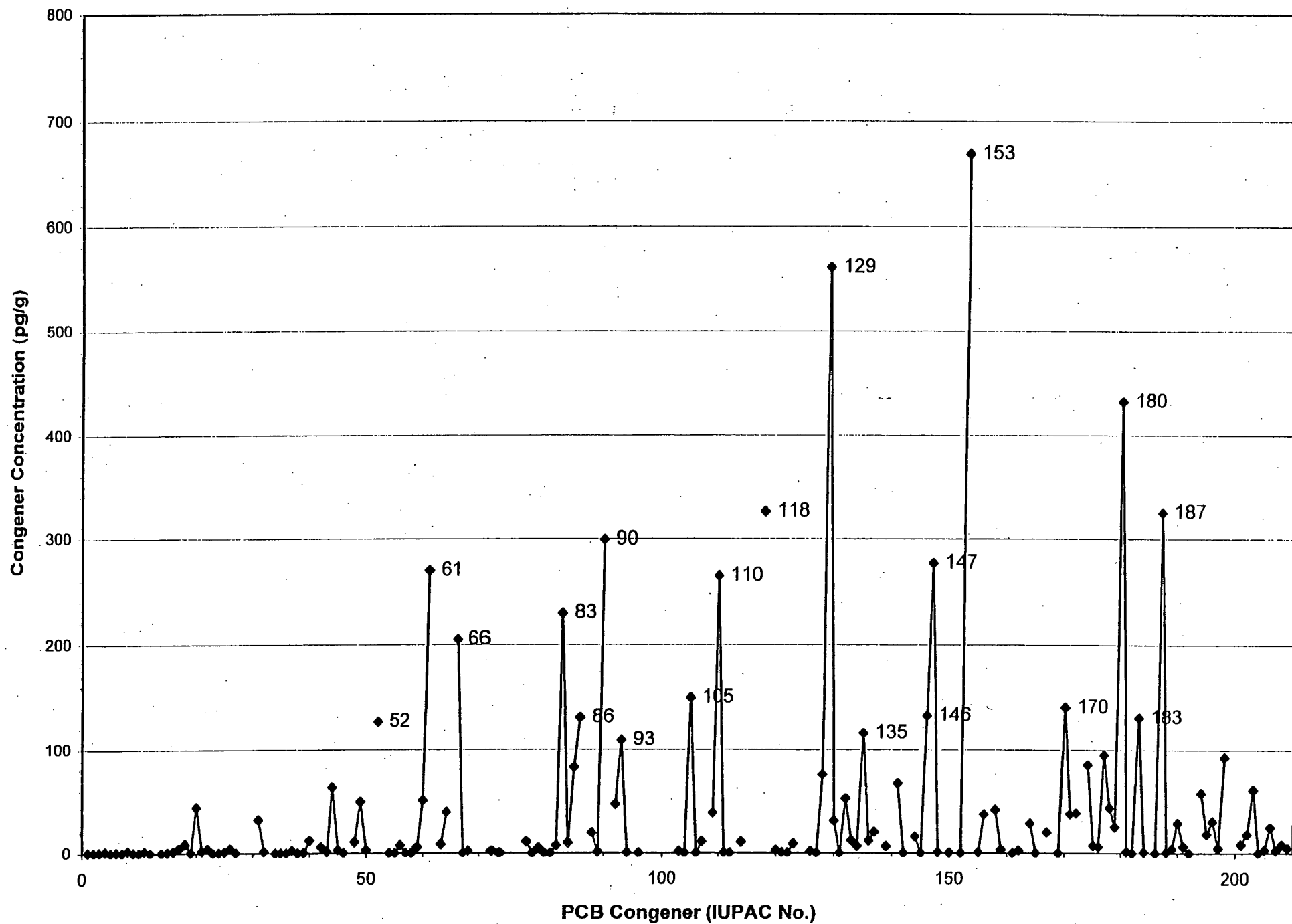
PCB Congener Concentration for Sample L3739-2, BR1 RT2



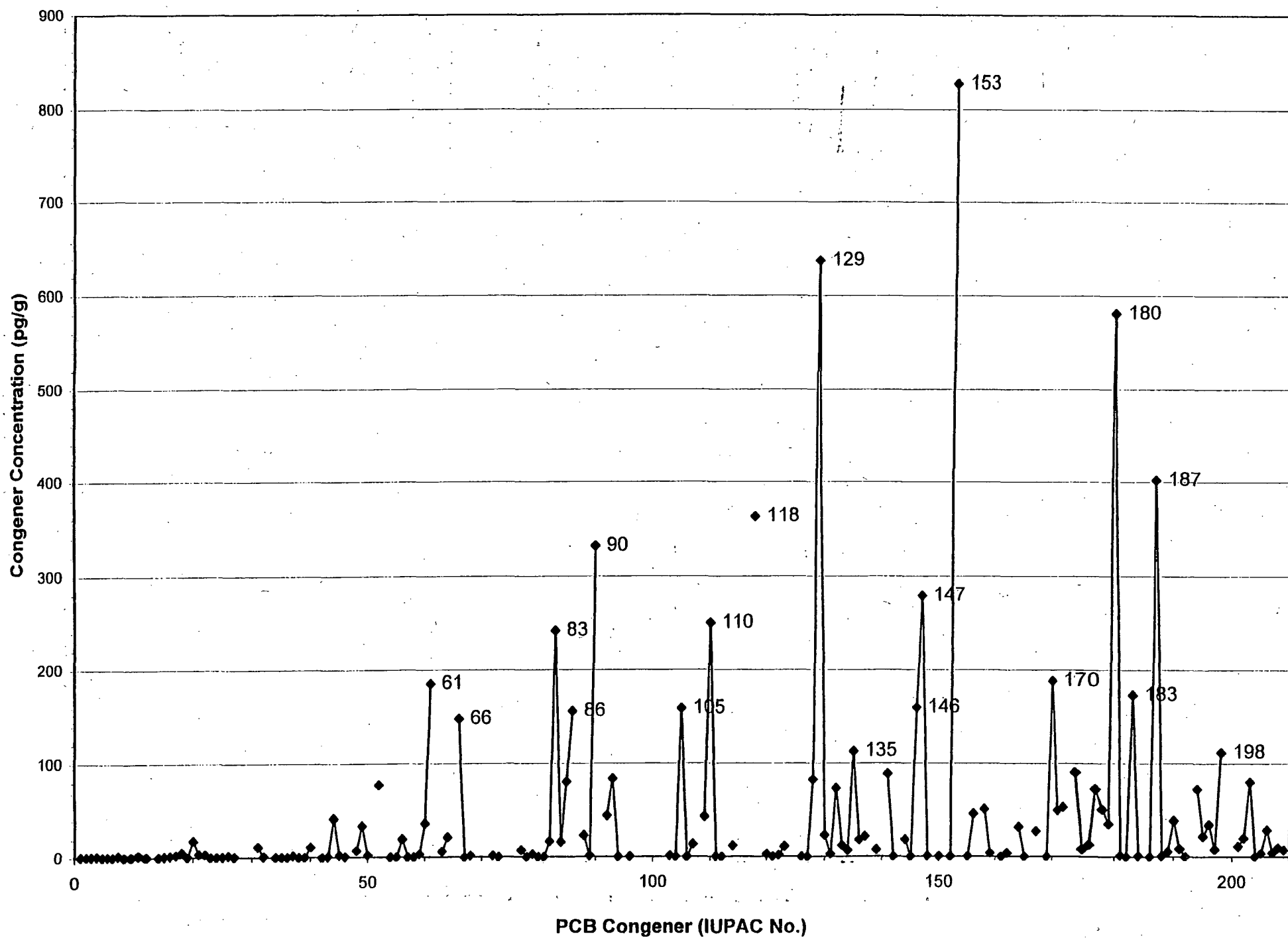
PCB Congener Concentration for Sample L3739-3, BR1 RT3



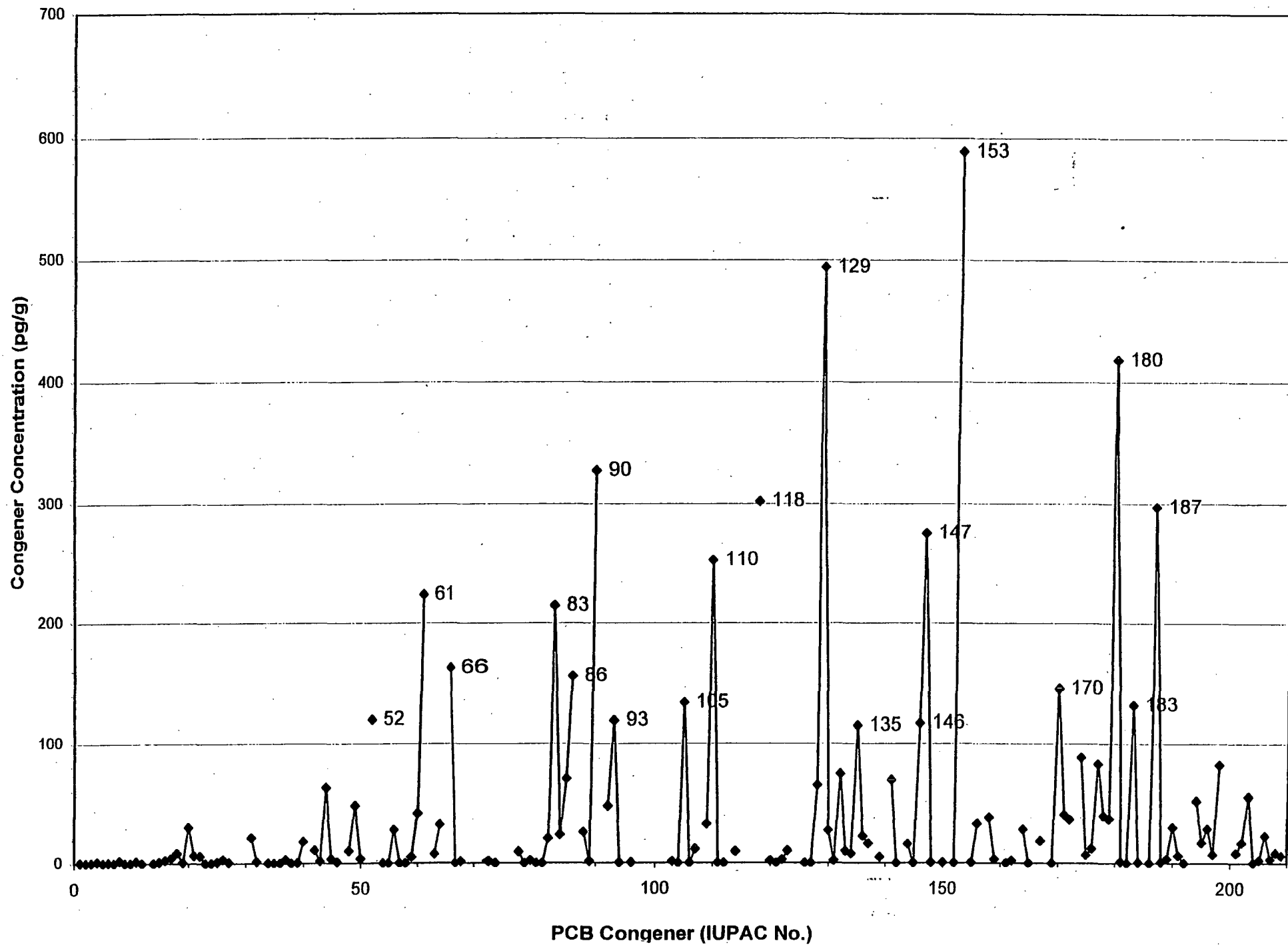
PCB Congener Concentration for Sample L3739-4, BR1 RT4



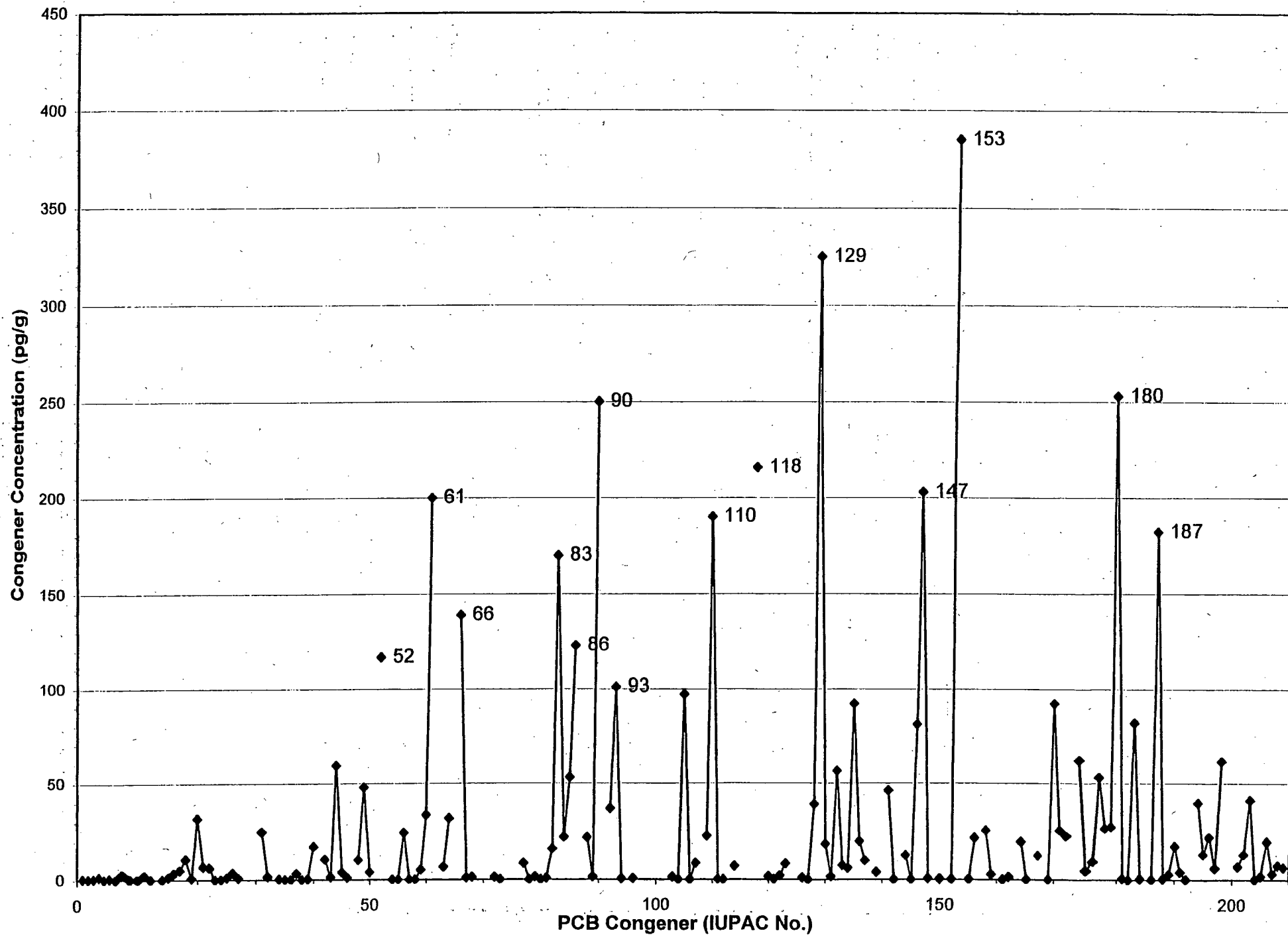
PCB Congener Concentration for Sample L3739-5, BR1 SS1



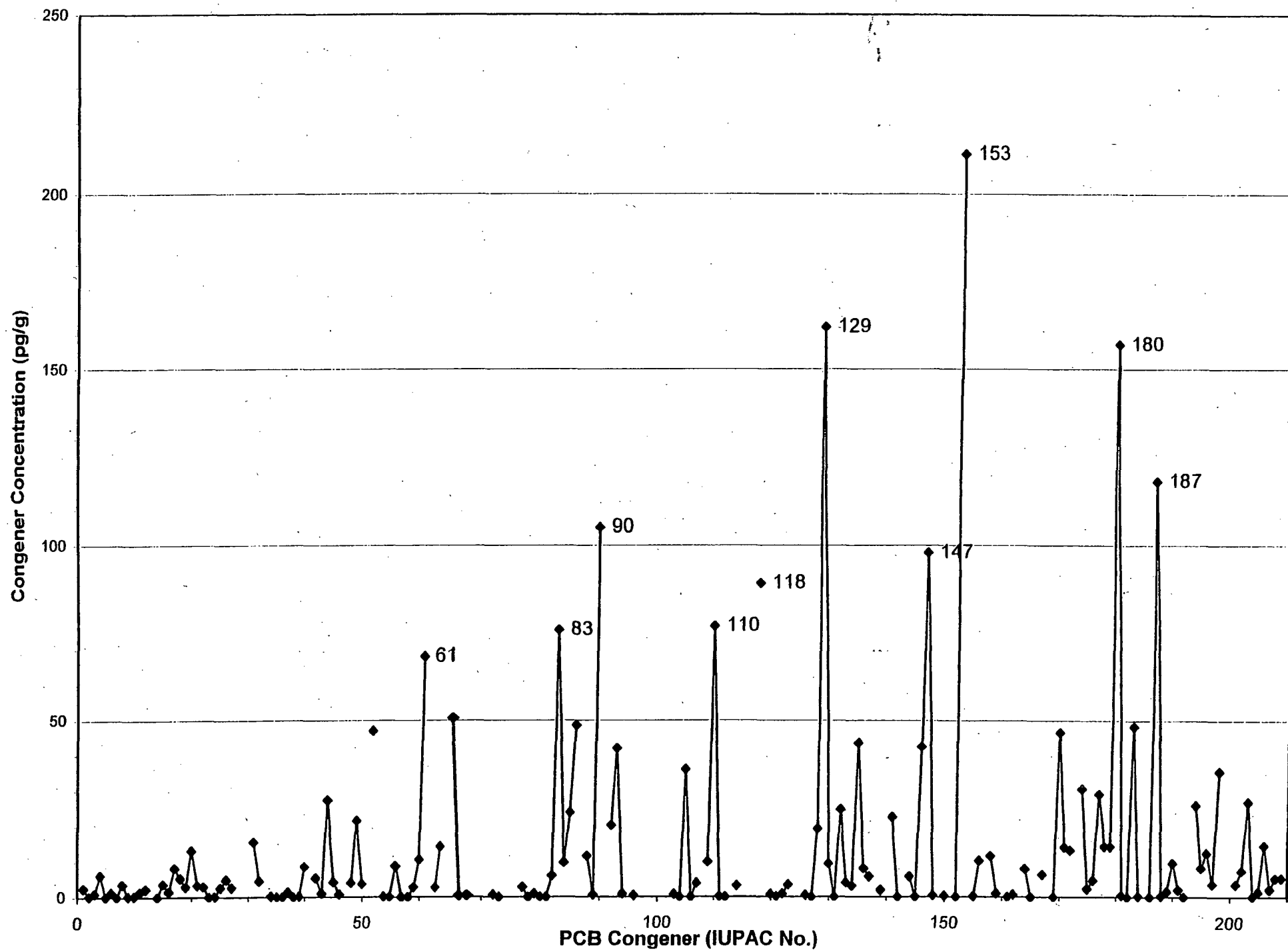
PCB Congener Concentration for Sample L3739-6, BR1 SS2



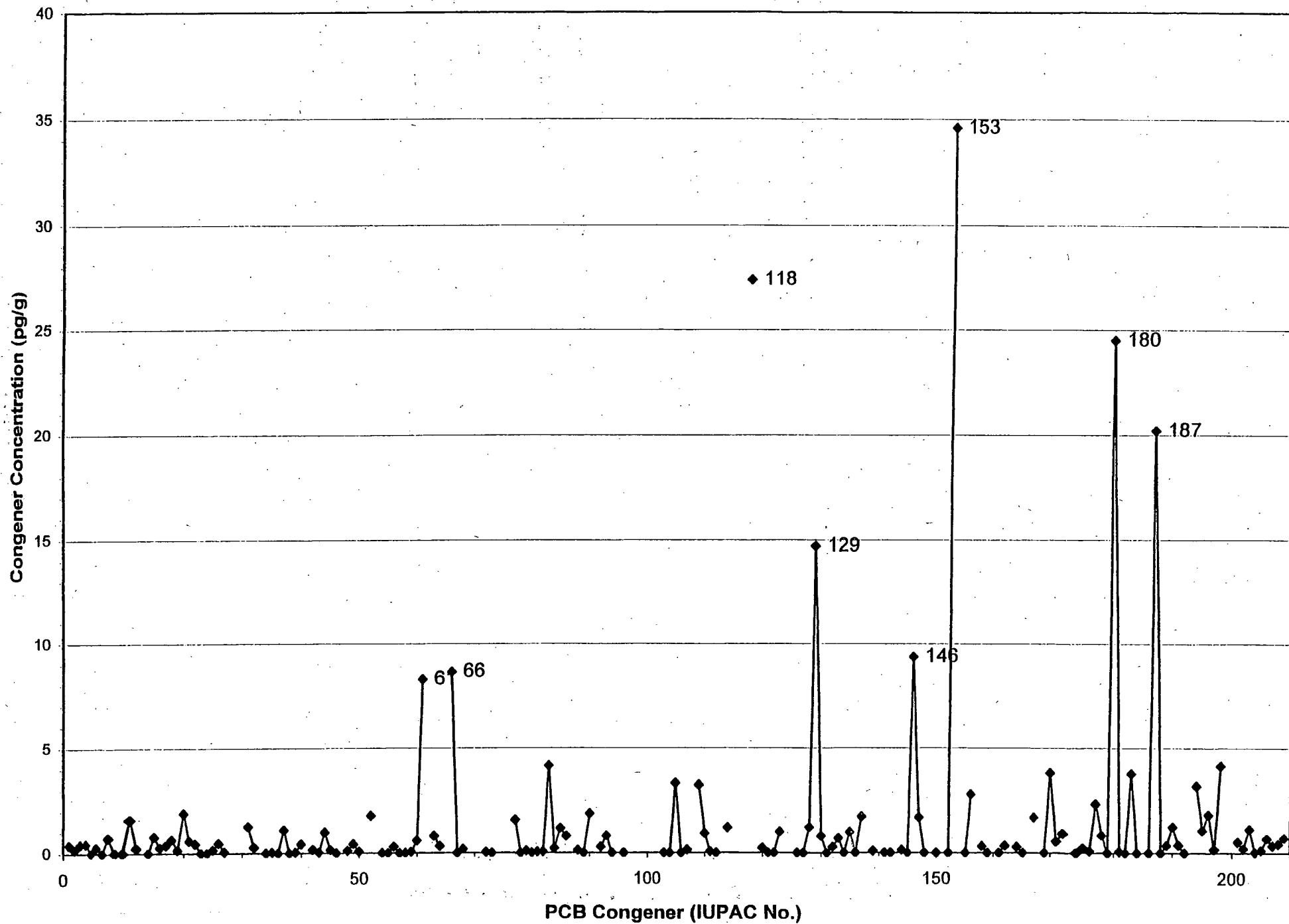
PCB Congener Concentration for Sample L3739-7, BR-1 SS3



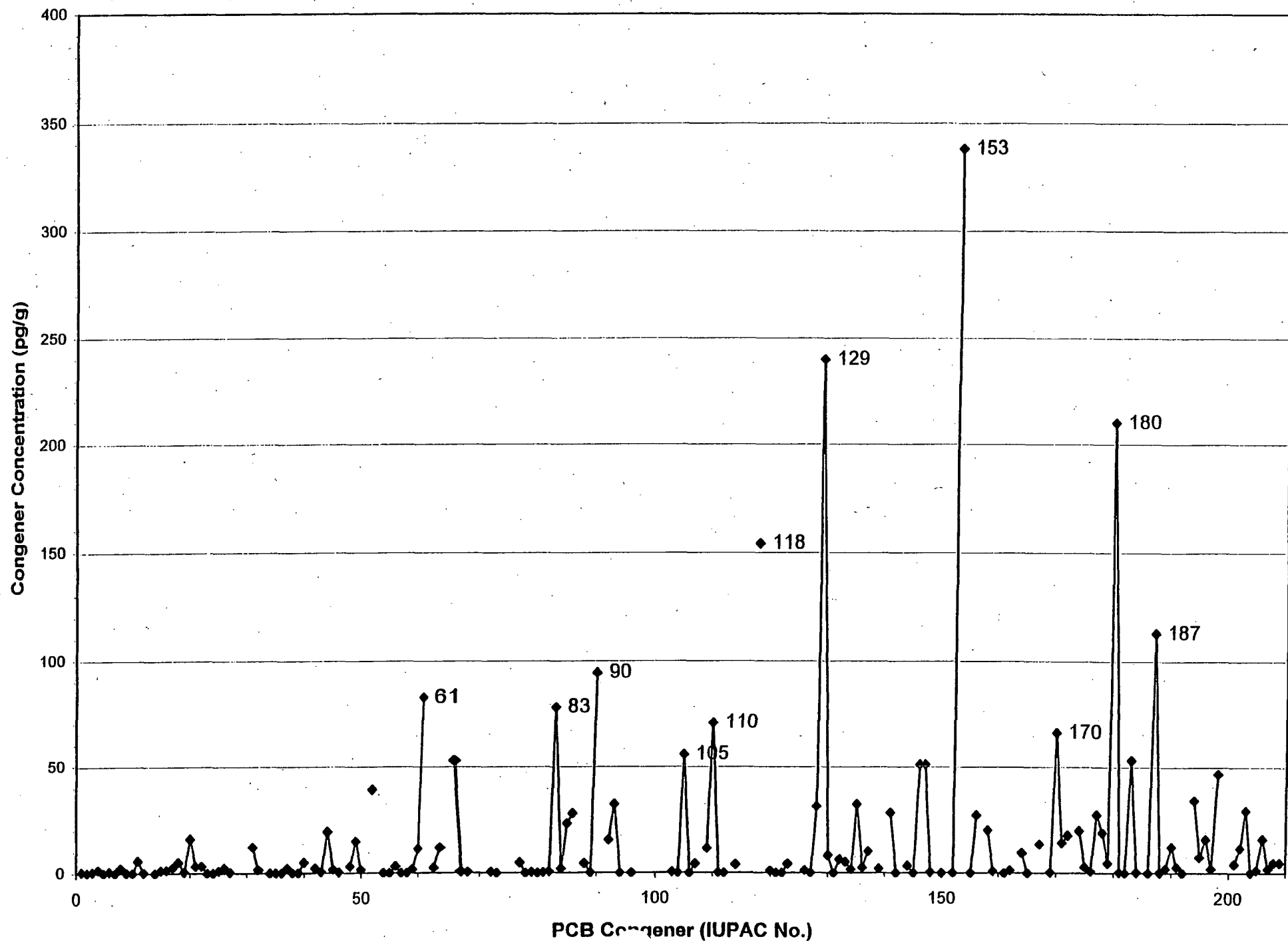
PCB Congener Concentration for Sample L3739-8, BR1 SS4



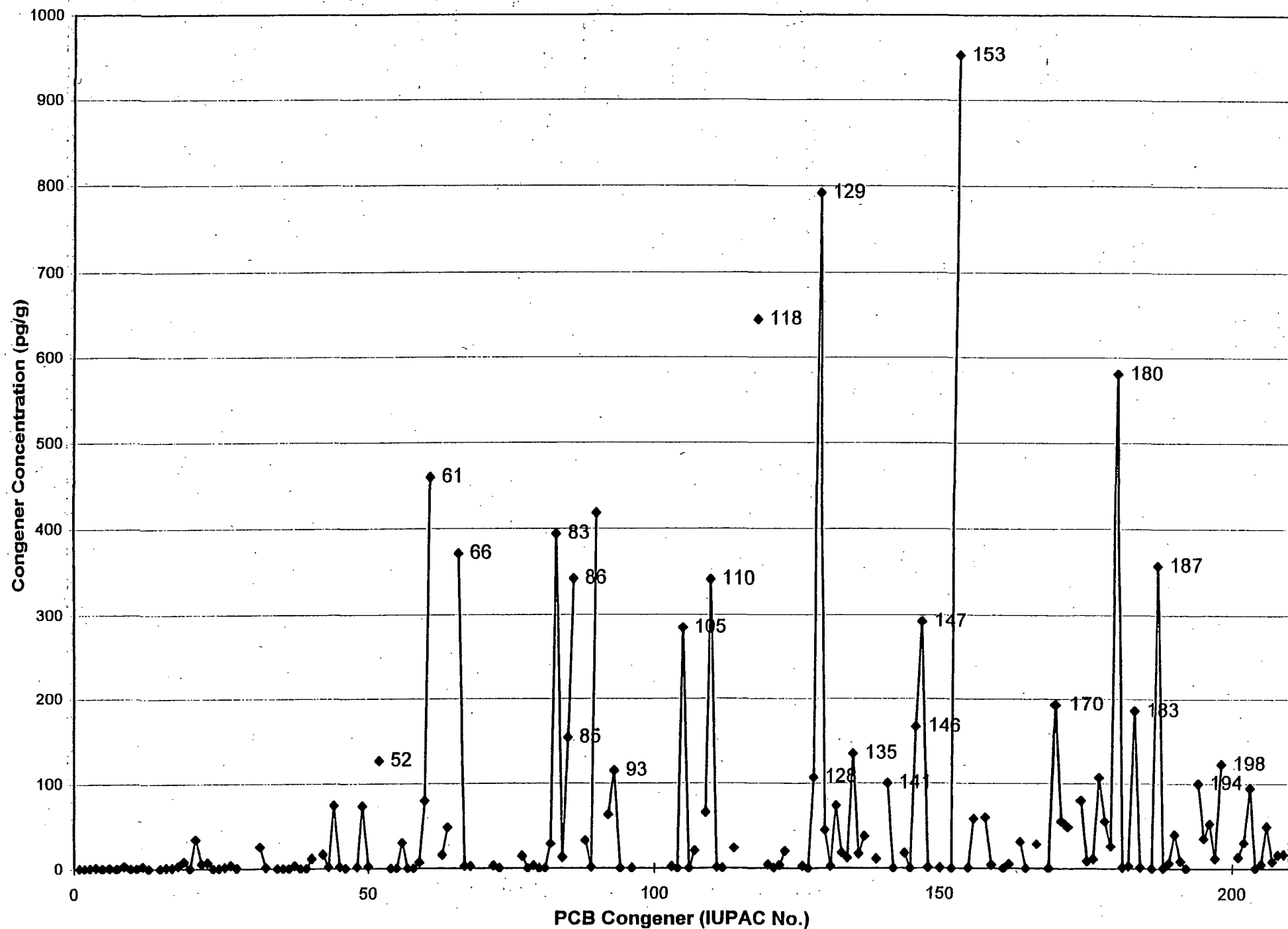
PCB Congener Concentration for Sample L3739-9i, BR1 CF1



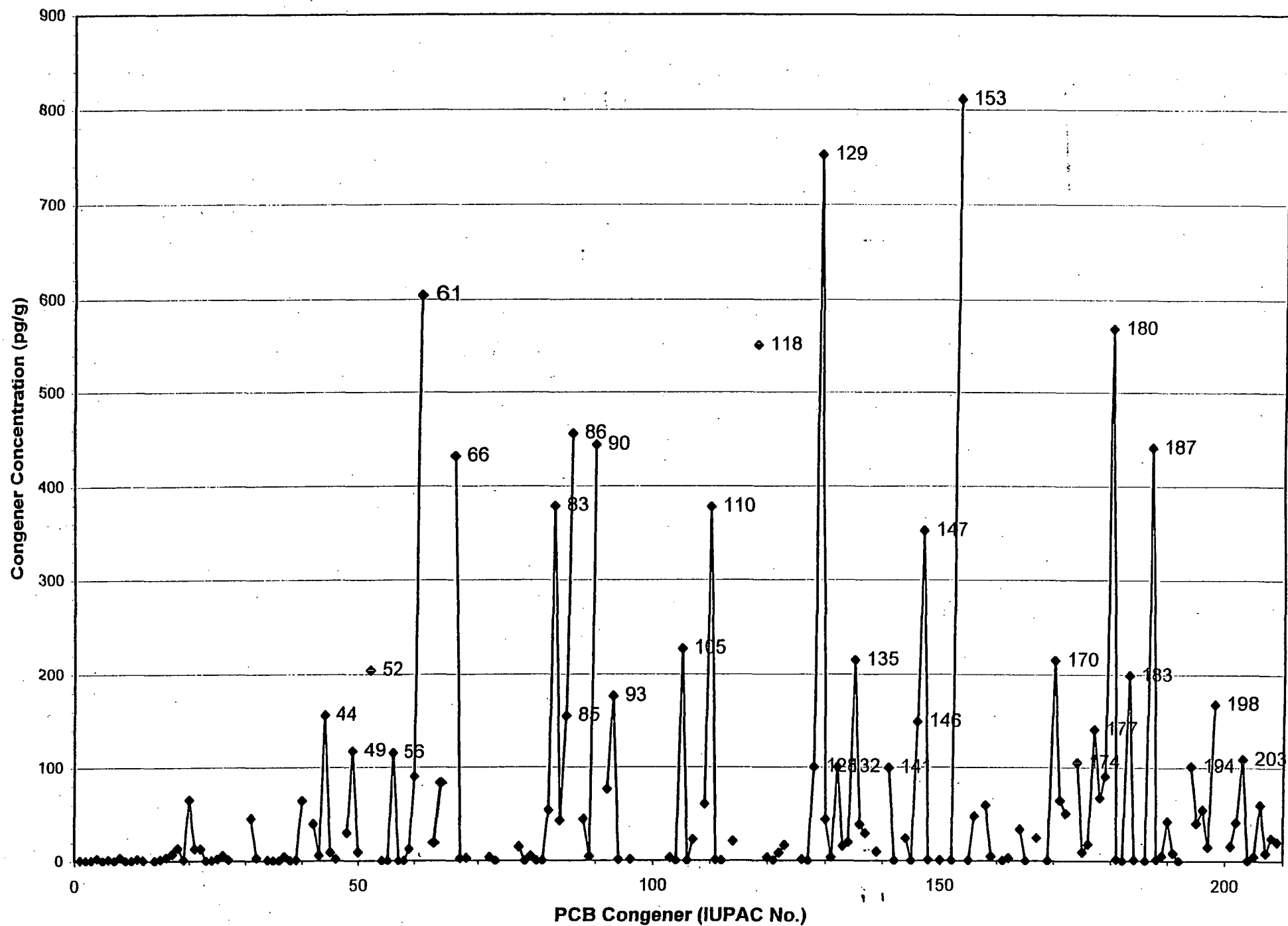
PCB Congener Concentration for Sample L3739-10, CA1 RT1



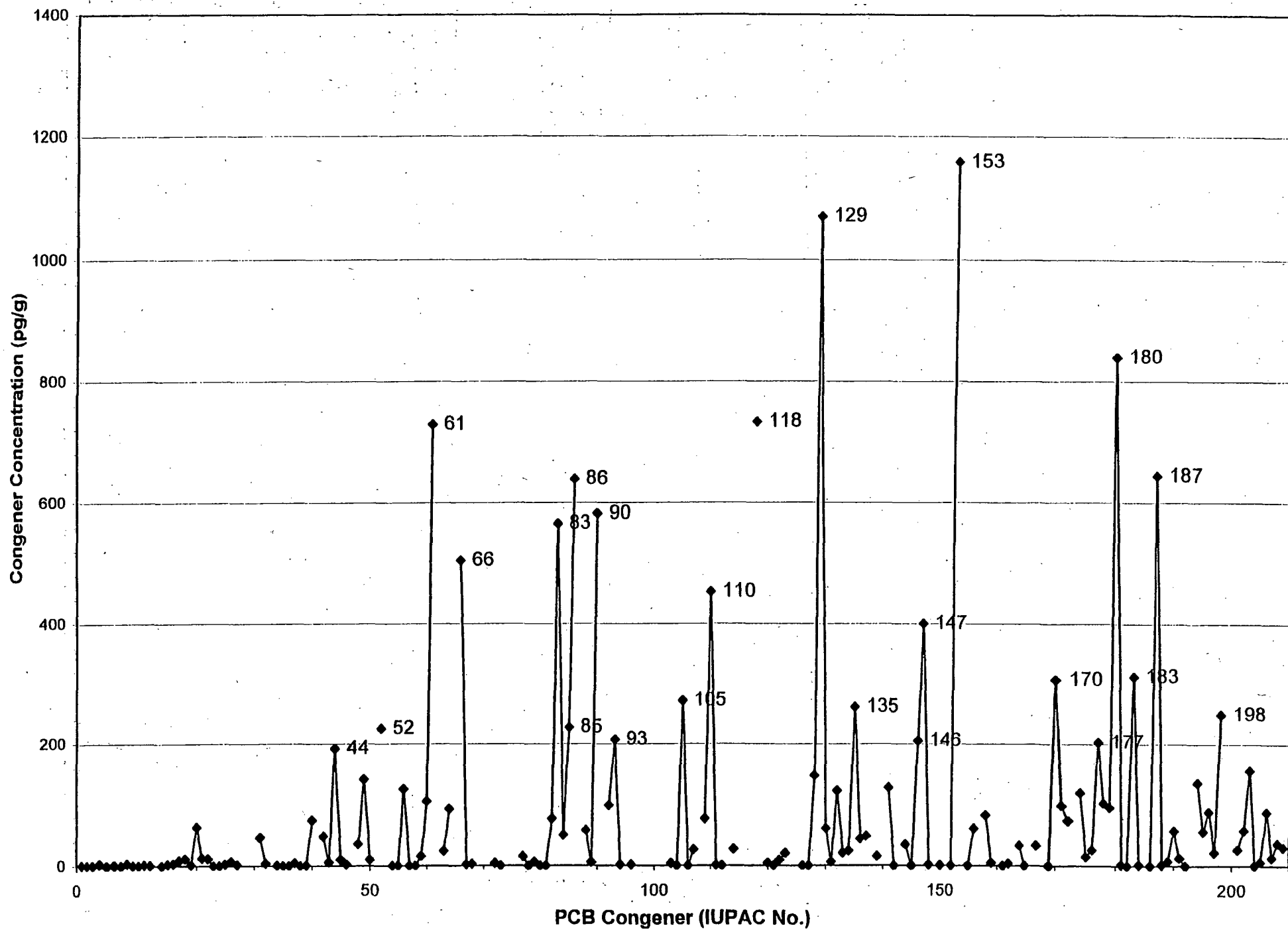
PCB Congener Concentration for Sample L3739-11, CA1 BT1



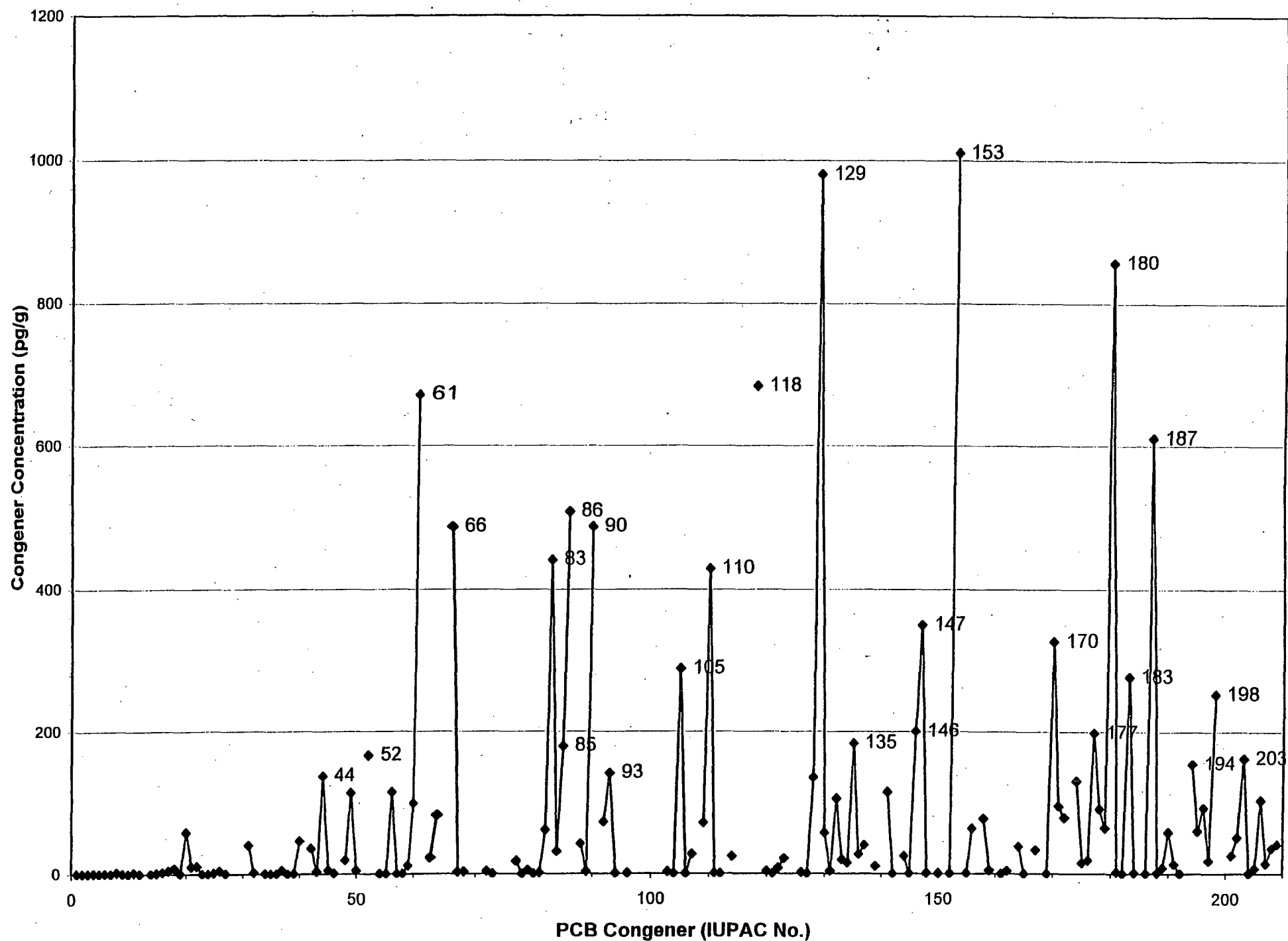
PCB Congener Concentration for Sample L3739-12, CA1 SS1



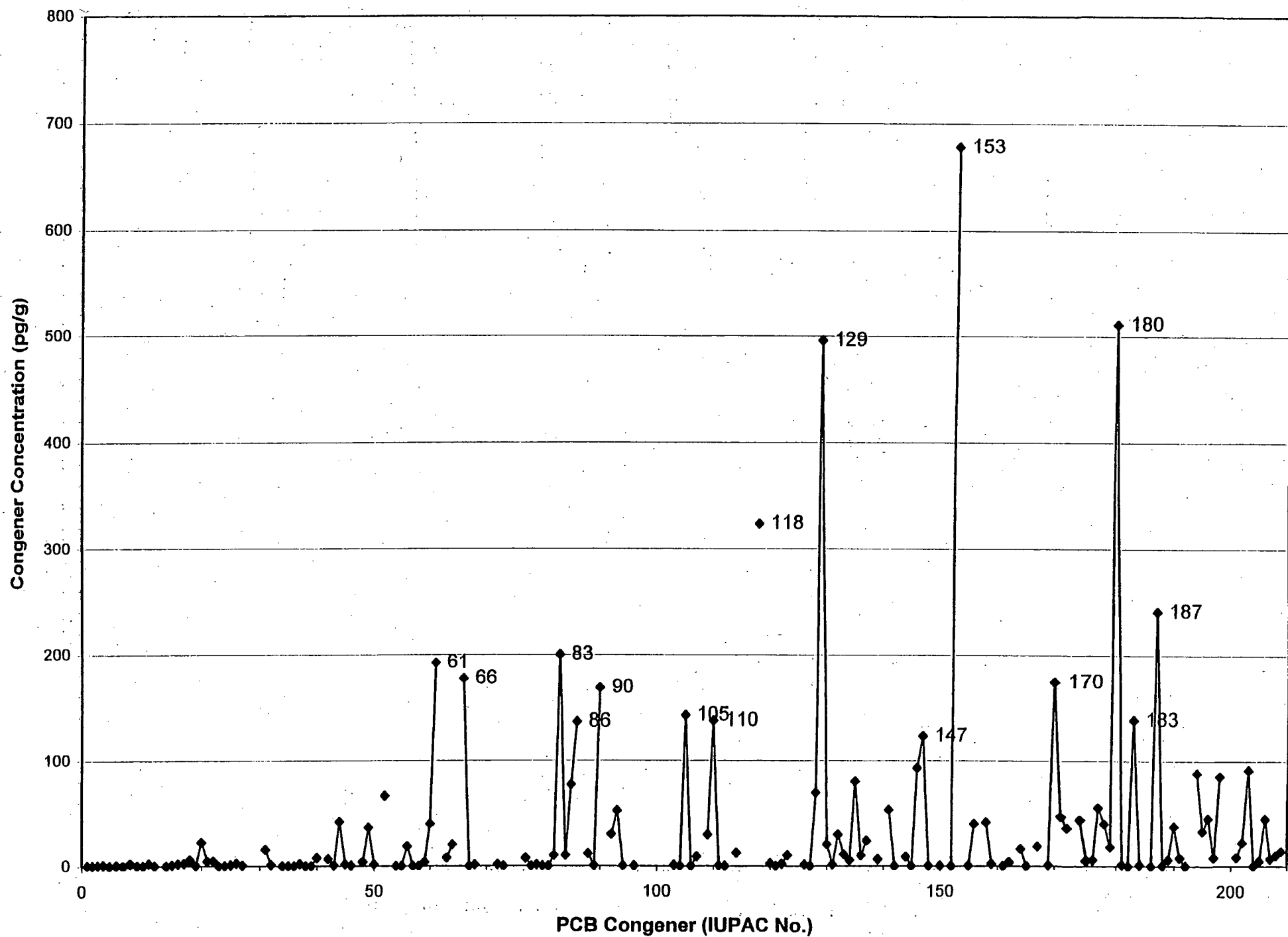
PCB Congener Concentration for Sample L3739-13, CA1 SS2



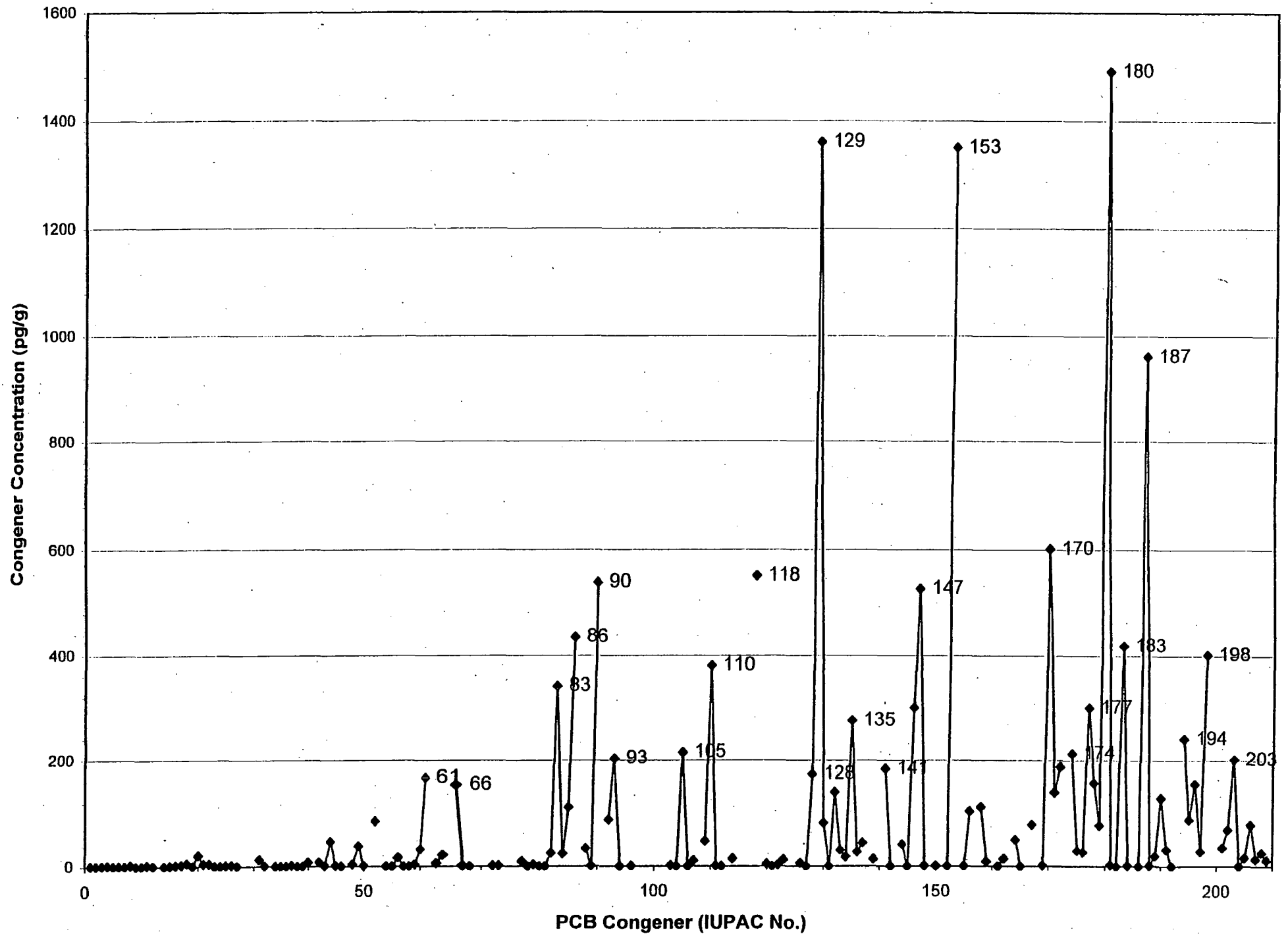
PCB Congener Concentration for Sample L3739-14, CA1 SS3



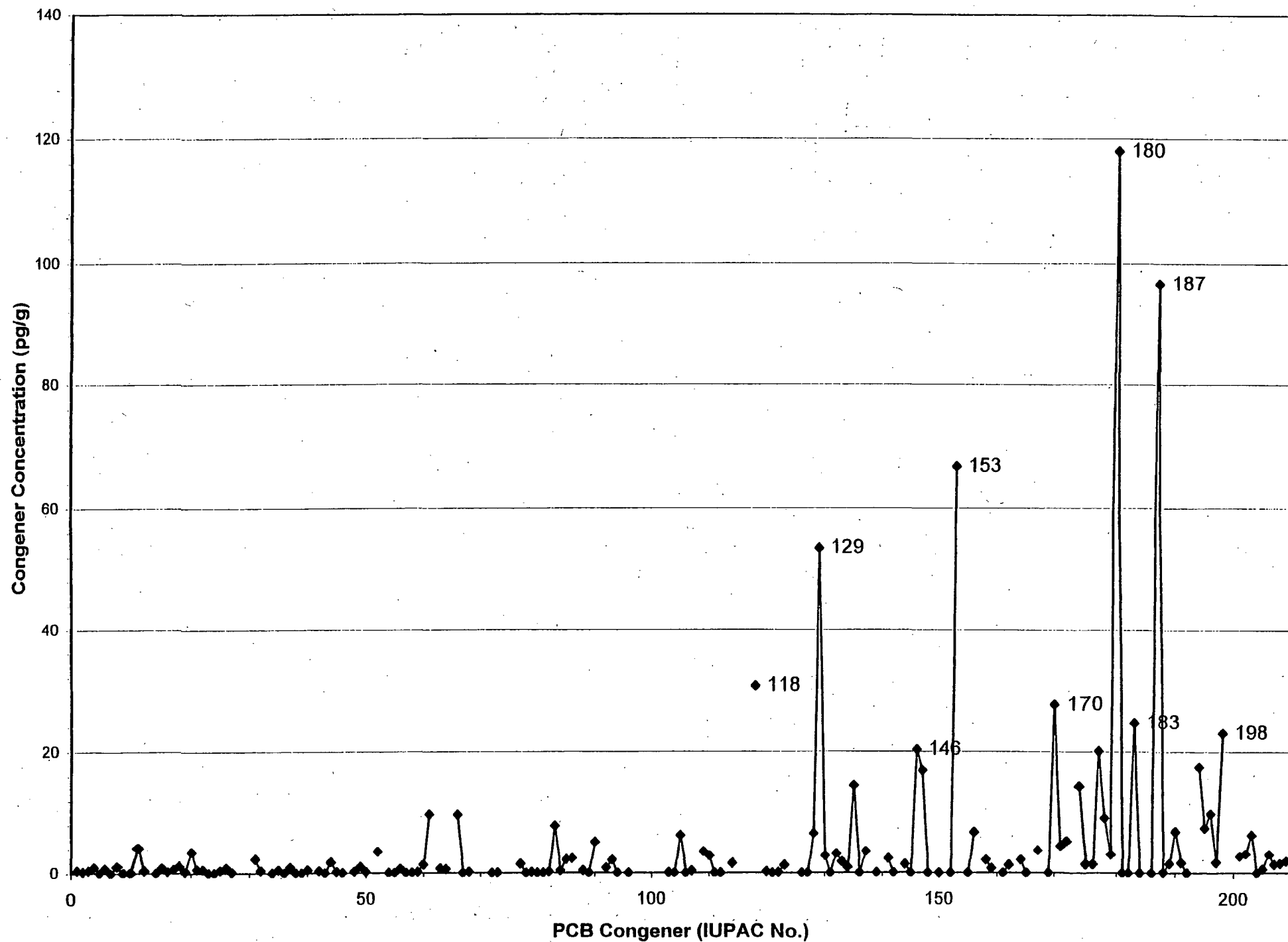
PCB Congener Concentration for Sample L3739-15, CA1 SB1



PCB Congener Concentration for Sample L3739-16, CA1 SB2



PCB Congener Concentration for Sample L3739-171, CA1 CF1 and CF2



Section B

Silver and Mercury in Tissue Samples Report

**Report to Tom Keegan
Ecorp Consulting, Inc.**

Silver and Mercury in Tissue Samples

Russell Gerads
Frontier Geosciences Inc.
414 Pontius Avenue North
Seattle, WA 98109
(206) 622-6960

October 29, 2001

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ICP-MS (Ag) Raw Data: ICP1-011010-1	30

Total Number of Pages (not including cover page and table of contents): 98

Silver and Mercury in Tissue Samples
Ecorp Consulting, Inc.

October 29, 2001

Frontier Geosciences Inc.
Seattle, WA

1. Scope of Work

Nine fish tissue samples were submitted by Axys Analytical for silver, inorganic mercury, and methyl mercury analysis by Ecorp Consulting, Inc. on September 20, 2001. All samples were analyzed using high-level QA/QC documentation.

2. Sample Receipt

Nine fish tissue samples were received on September 21, 2001. It should be noted that the samples were initially sent to Axys Analytical Services, LTD. for homogenization before receipt at Frontier. All samples were logged in according to Frontier's protocols on the day of receipt and were received secure and in good condition in a sealed cooler with a temperature documented at 1.4 °C.

3. Analysis

Samples were processed using ultra-clean sample handling techniques in a laboratory known to be low in atmospheric Hg. Reagents, gases, and DI water are all reagent or ultra-pure grade, and previously analyzed for Hg to ensure negligible blanks. All Hg analysis were performed using cold vapor atomic fluorescence spectrometry (CVAFS) as a detector (Bloom and Fitzgerald, 1988), with dual pen chart recorders or integrators as output devices. Monomethyl mercury (MMHg) standards were made up from the pure powder, and then accurately calibrated for MMHg (equal to THg minus ionic Hg) against NBS-3133. MMHg results were also cross-verified by daily analysis of NRCC DORM-2 ($4,470 \pm 370$ ng/g MMHg).

Silver Analysis in Tissue

Prior to analysis the tissue samples were digested to liberate the silver. Homogenized samples are accurately weighed (approximately 0.5 g wet tissue sample or a reasonable amount of plant tissue) into a tared 40-mL glass vial. Ten milliliters of concentrated nitric acid is added. The vials are capped with Teflon® stoppers and heated on a hotplate until the sample has gone into solution. The samples are diluted to 40 mL with reagent water.

Silver was determined using inductively coupled plasma - mass spectrometry (ICP-MS) with a Perkin-Elmer ELAN ICP-MS. Prepared samples are introduced into a radio frequency (RF) plasma where energy-transfer processes cause desolvation, atomization, and ionization. The ions are extracted from the plasma through a differentially pumped vacuum interface and separated based on their mass-to-charge ratio (m/z) by a mass spectrometer. A solid-state detector detects ions transmitted through the mass analyzer and the resulting current is processed by a data handling system. Daily analytical runs were begun with a 6-point standard curve, spanning the entire analytical range of interest, with additional continuing calibration verification (CCV) standards run every 10 samples. The daily standard curves were calculated with the initial standards (calibration blank corrected) of the day, using linear regression, forced through zero (ELAN software). All sample results are reported instrument and preparation blank corrected. The ICP-MS software performs most calculations for trace metals determination automatically, and outputs hardcopies with results in $\mu\text{g/L}$ units uncorrected for the preparation blanks and instrument blanks. Blank correction is performed using an Excel spreadsheet using the following equation, where:

C is the sample concentration calculated by ICP-MS software in $\mu\text{g/L}$ units

DF is the dilution factor of the sample

IB is the mean concentration of the instrument blanks in $\mu\text{g/L}$ units

PB is the mean concentration of the preparation blanks in $\mu\text{g/L}$ units

$$[\text{Metal}] (\mu\text{g/L}) = C - (DF * IB) - PB$$

Mercury Analysis in Tissues

General. Mercury analyses were performed using cold vapor - atomic fluorescence spectrometry (CV-AFS), with dual-pen chart recorders or integrators as output devices. Total mercury (THg) standards (used for Hg^{2+}

analysis) are prepared by direct dilution of NIST-certified NBS-3133 10.00 mg/mL Hg standard solution, and results are independently verified by the analysis of NIST 1641d (THg in Water CRM). Monomethyl mercury (MeHg) standards were made up from the pure powder, and then accurately calibrated for MeHg (equal to THg minus ionic Hg) against NBS-3133. MeHg results were also cross-verified by the analysis DORM-2 (dogfish tissue CRM).

All daily analytical runs for mercury were begun with a 5-point standard curve, spanning two orders of magnitude, with additional standards (CCVs) run every 10 samples. The standard curve was calculated with the initial standards (blank corrected) of the day, using linear regression, forced through zero. Calculations were performed manually, by Excel spreadsheet.

Due to the high percentage of MeHg in tissue samples, total mercury is determined as the sum of the MeHg concentration and the Hg(II) concentration.

Prior to analysis, the tissue samples were digested to liberate the MeHg and Hg(II). An aliquot of tissue was weighed into a glass vial. To each sample, 10 mL of 25% KOH/methanol was added. The vials were heated on a hotplate for 2 hours at 60 °C, then diluted to 40.0 mL with methanol.

Mercury(II) Analyses. Digested samples were analyzed for Hg(II) using the same method that is typically used for the analysis of THg, with the exception that no BrCl is used.

Aliquots of each digest (usually 1 mL) were reduced in pre-purged reagent water to Hg^0 with $SnCl_2$, and then the Hg^0 is purged onto gold traps as a preconcentration step. The Hg contained on the gold traps was then analyzed by thermal desorption into a CV-AFS detector using the dual amalgamation technique. Peak heights or peak areas were accessed by chart recorder or integrator and recorded on bench sheets. Net Hg(II) concentrations were calculated according to the following formula, where:

PH_s is the chart recorder peak height
 PH_b is the mean bubbler blank peak height
 S is the calibration curve slope in units/ng
 V is the aliquot volume in L
 DF is the dilution factor of the digestate
 B is the mean method blank in ng/L (corrected for bubbler blanks and DF)
 DV is the final volume of the digestate in L
 M is the mass of sample analyzed in g

$$[Hg(II)] \text{ (ng/g)} = \{[(PH_s - PH_b)/S/V*DF] - B\} * DV/M$$

Methyl Mercury Analyses. Extracted samples were analyzed for MeHg using aqueous phase ethylation, purging onto a Carbotrap, isothermal GC separation, and CV-AFS detection. Prior to ethylation, the bubbler was brought to pH 5.0 with the addition of acetate buffer. Samples were ethylated by the addition of sodium tetraethyl borate, and then the volatile ethyl analogs purged with N_2 onto Carbotrap. After a trap drying step, the mercury ethyl analogs were thermally desorbed into a 1-m isothermal GC column (15% OV-3 on Chromasorb WAW-DMSC) held at 100°C for separation. The column resolves the following peaks: elemental Hg, dimethyl Hg, methyl ethyl Hg, and diethyl Hg. Because of the wet chemistry used only methyl ethyl Hg, the MeHg analog is quantified for this assay. The organo-Hg compounds are pyrolytically broken down to Hg⁰ prior to entering the CV-AFS detector for quantification. Peak heights were accessed by chart recorder and recorded on bench sheets. Net MeHg concentrations were calculated according to the following formula, where:

PH_s is the chart recorder peak height (or the integrator peak area)
 PH_b is the mean bubbler blank peak height
 S is the calibration curve slope in units/ng
 V is the aliquot volume in L
 DF is the dilution factor of the digestate
 B is the mean method blank in ng/L (corrected for bubbler blanks and DF)
 DV is the final volume of the digestate in L
 M is the mass of sample analyzed in g

$$[MeHg] \text{ (ng/g)} = \{[(PH_s - PH_b)/S/V*DF] - B\} * DV/M$$

4. Analytical Issues

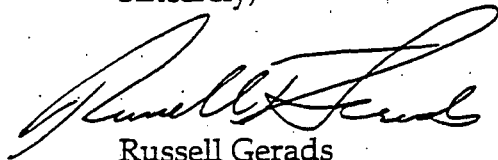
There were no significant analytical difficulties experienced with these samples and all quality control analyses looked good with the following exceptions.

It should be noted that the samples were initially analyzed for methyl mercury on October 4, 2001 and were reanalyzed on October 18, 2001 due to unstable instrumentation. All quality control measures were well within Frontier's guidelines; therefore, all results are taken from the October 18, 2001 analysis.

No certified value is available for Hg(II) in the standard reference material DORM-2. For this reason, the certified value for total Hg in DORM-2 was used to calculate the percent recovery of this CRM.

Please feel free to contact me with any questions or concerns regarding this report.

Sincerely,

A handwritten signature in black ink, appearing to read "Russell Gerads", written in a cursive style.

Russell Gerads
Project Coordinator
Russg@frontiergeosciences.com

AXYS ANALYTICAL SERVICES LTD.
Subcontracting Record

Subcontractor: FRONTIER GEOSCIENCE Quote # _____

P.O. # 3644

Phone No.: 206-622-6960

Contract No.: 4098

Project Chemist: GEORGINA BROOKS

Contact: ANNE FOWLER
P.M.

Turn-around time requested: _____

LAB ID	CLIENT ID	MATRIX	ANALYSES REQUESTED	
L3739-10	/	FISH TISSUE	METHYL MERCURY, INORGANIC MERCURY, TOTAL SILVER	
L3739-11	/			
L3739-12	/			
L3739-13	/			
L3739-14	/			
L3739-15	/			
L3739-16	/			
L3739-17	/	CRAYFISH TISSUE		
L3739-19	/	EMPTY JAR.		FOR (JAR PROOF)
No. Samples:	Date Shipped:	Shippers Name:	WAY Bill #:	Signature:
9	20 Sept 01	M. Wells	7909 5920 6660	

Mandatory Requirement:
Results of blanks, reference samples (spikes, CRMs) and duplicate analyses must be provided with sample data. Any deviation from this requirement must be specifically approved by Axys.

Please include P.O. # on all correspondence concerning this/these samples.

Notes: Temp. 1.4°C	A. Malachuk	9-21-01
VTSR: 1030	A. Malachuk Labberts	1445
Fed Ex del.	7909 5920 6660	

Address inquiries and data to:

Diane Lusznjak

Axys Analytical Services Ltd.

P.O. Box 2219, 2045 Mills Road

Sidney, B.C. V8L 3S8

Tel. (250) 655-5800 FAX (250) 655-5811

QC Results for ECORP

Report to Tom Keegan

Reported on October 29, 2001

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Sample Results

Analyte (ng/g)	L3739-10	L3739-11	L3739-12	L3739-13	L3739-14
Ag (ug/g)	0.014	0.010	0.005	0.006	0.005
Methyl Mercury	53.5	69.1	53.2	91.1	89.0
Hg(II)	1.10	1.44	1.44	1.76	1.85
Total Mercury	54.5	70.6	54.7	92.8	90.8

Analyte (ng/g)	L3739-15	L3739-16	L3739-17
Ag (ug/g)	0.004	0.002	0.023
Methyl Mercury	111	55.6	31.5
Hg(II)	3.29	1.03	1.82
Total Mercury	114	56.7	33.3

*Total Hg = Methyl Hg + Hg(II)

QC Summary for ECORP

Report to Tom Keegan

Reported on October 29, 2001

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Quality Control Data - Preparation Blank Report

Analyte (ng/g)	PBW1	PBW2	PBW3	PBW4	Mean	Std Dev	Est. MDL
Ag (ug/g)	0.001	0.001	0.001	0.001	0.001	0.0002	0.001
Methyl Mercury	0.8	1.1	0.3	1.1	0.8	0.4	1.2
Hg(II)	0.63	0.37	0.44	-	0.48	0.13	0.40

- =only three blanks used in the determination of the eMDL

Quality Control Data - Certified Reference Material Report

Analyte (ng/g)	CRM Identity	Cert. Value	Obs. Value	%Rec.
Ag (ug/g)	DOLT-2	0.608	0.658	108.2
Methyl Mercury	NIST 1641d	4470	4482	100.3
Total Mercury	DORM-2	4640	4509	97.2

CRM Identity = Certified reference material identity

Cert. Value = Certified value

Obs. Value = Experimental result

% Rec. = Percent recovery

QC Summary for ECORP

Report to Tom Keegan

Reported on October 29, 2001

Frontier Geosciences Inc., 414 Pontius Ave. N, Seattle WA 98109

Quality Control Data - Matrix Duplicate

Analyte (ng/g)	Sample QC'd	Rep. 1	Rep. 2	Mean	RPD
Ag (ug/g)	L3739-11	0.010	0.010	0.010	4.1
Methyl Mercury	L3739-10	53.5	63.4	58.4	17.0
Hg(II)	L3739-10	1.10	1.21	1.15	9.6

Quality Control Data - Matrix Spike / Matrix Spike Duplicate Report

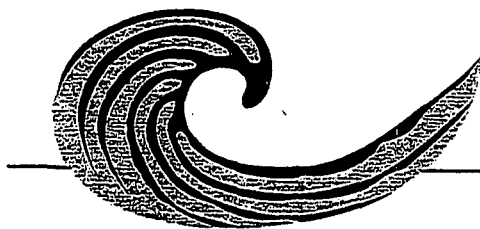
Analyte (ng/g)	Sample QC'd	Sample Mean	Spike Level	MS	% Rec.
Ag (ug/g)	ACB-P-091001	0.010	2.000	2.123	105.7
Methyl Mercury	Another Client	58.4	174.3	260.8	116.1
Hg(II)	Another Client	1.15	9.27	11.96	116.6

Analyte (ng/g)	Sample QC'd	Sample Mean	Spike Level	MSD	% Rec.	RPD
Ag (ug/g)	ACB-P-091001	0.010	2.000	2.007	99.9	5.6
Methyl Mercury	Another Client	58.4	166.1	231.4	104.2	10.9
Hg(II)	Another Client	1.15	8.83	11.77	120.2	3.1

MS = matrix spike

MSD = matrix spike duplicate

RPD = relative percent difference



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ENVIRONMENTAL RESEARCH CORPORATION

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Dataset Cover Page

Dataset ID: MHG7-011018-1Preparation: KOH/ MethanolAnalyst: MeyerData Analysis: Meyer**Client/Project Name***

ECORP 9/21 RERUN

Clients with name in bold are High QA*Analytical Issues/explanations:**

All results are bubbler blank corrected, except for samples with ID #'s of: ICB, CCB, or BB.

No problems to report.

**QUALITY ASSURANCE
PEER-REVIEWED**INITIALS: SNC 10/22/01

Frontier Geosciences

Analysis Datasheet for Methyl Mercury

Date of Analysis: Oct 18, 2001

Instrument #: CVAFS-7

Calibration #: 1

Analyst: Meyer

Project(s): ECORP 9/21 RERUN

Preparation: KOH/ Methanol

FGS Dataset ID: MHG7-011018-1

Calibration Statistics:

Slope: 1138.0 units/ng

SE: ±8.11

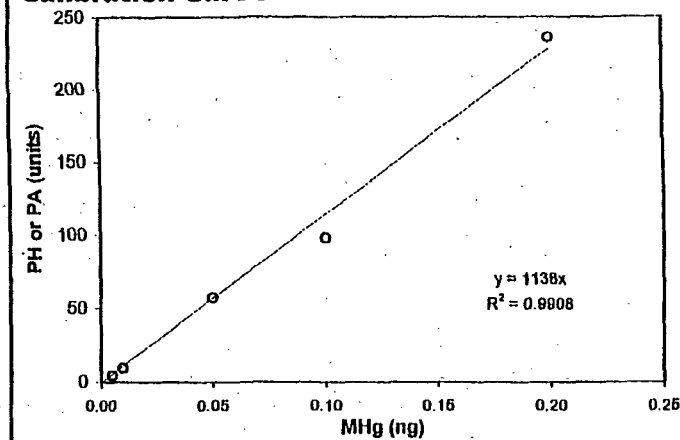
R2: 0.9908

R: 0.9954

Obs: 5

True Val	PH	PH-BB	Calc Values	
0.005 ng	5.00	4.70	0.0041 ng	5.69
0.050 ng	57.50	57.20	0.0503 ng	56.90
0.100 ng	98.00	97.70	0.0858 ng	113.80
0.200 ng	236.00	235.70	0.2071 ng	227.61
0.010 ng	9.90	9.60	0.0084 ng	11.38

Calibration Curve



Blanks:

PB#	Sample ID	n	Mean	Std Dev
-	ICB			
-	CCB	3	0.30 units	±0.10
1	PBT	4	10.544 ng/L	±4.971
2				

Lab Control Samples:

Run#	Sample ID	Conc	Dil Factor	True Val	Rec
06	ICV/Dorm-2	4277.5 ng/g	2000	4470.0 ng/g	95.7%
13	DORM-2	4481.69 ng/g		4470.0 ng/g	100.3%

ML Spikes:

Matrix	Digestion	ML Conc. (ng/g or ng/L)	True Value (ng/g or ng/L)	
Tissue	KOH/ Meth	16.028	16.000	100.2%

Laboratory Standards

Type	Concentration	ID Number
Calibration #1	0.05 ng/mL	Hg2-9-11
Calibration #2	1.0 ng/mL	Hg2-13-13
SRM (DORM-2)	4470 ng/L	Hg2-5-7
ML SPIKE	100 ng/mL	Hg2-12-6
MS/MSD	717.2 ng/mL	MHg-717-051398
CCV	1.0 ng/mL	Hg2-13-13

Data Set	Run	Tp	Bub	Sample ID	Aliquot Volume	Peak Ht	Dilution	Sample Mass	Digest Volume	MHg per Aliquot	MHg Conc (Gross)	PB #	MHg Conc (Net)	MHg per Extract	MHg Conc (Solid)	Remarks
MHG7-011018-1	01	1	1	0.005 ng (Calib. Std. #1)	50.000 mL	5.0	1			0.0041 ng	0.083 ng/L		0.083 ng/L			
MHG7-011018-1	02	2	2	0.050 ng (Calib. Std. #2)	50.000 mL	57.5	1			0.0503 ng	1.005 ng/L		1.005 ng/L			
MHG7-011018-1	03	3	3	0.100 ng (Calib. Std. #2)	50.000 mL	98.0	1			0.0858 ng	1.717 ng/L		1.717 ng/L			
MHG7-011018-1	04	4	4	0.200 ng (Calib. Std. #2)	50.000 mL	236.0	1			0.2071 ng	4.142 ng/L		4.142 ng/L			
MHG7-011018-1	05	5	1	0.010 ng (Calib. Std. #1)	50.000 mL	9.9	1			0.0084 ng	0.169 ng/L		0.169 ng/L			
MHG7-011018-1	06	6	2	ICV/Dorm-2 (2.24 ng/L)	50.000 mL	122.0	1	1.0000 g	1000.0 mL	0.1069 ng	2.139 ng/L		2.139 ng/L	2.139 ng	2.139 ng/g	95.5 %Rec
MHG7-011018-1	07	7	3	ICB	50.000 mL	0.2	1			0.0002 ng	0.004 ng/L		0.004 ng/L			
MHG7-011018-1	08	8	4	ML spike + 16 ng/g	0.025 mL	6.0	1	0.5000 g	40.0 mL	0.0050 ng	200.344 ng/L		200.344 ng/L	8.014 ng	16.028 ng/g	
MHG7-011018-1	09	1	1	PBT-1	0.025 mL	0.6	1	0.5000 g	40.0 mL	0.0003 ng	10.544 ng/L		10.544 ng/L	0.422 ng	0.844 ng/g	
MHG7-011018-1	10	2	2	PBT-2	0.025 mL	0.7	1	0.5000 g	40.0 mL	0.0004 ng	14.059 ng/L		14.059 ng/L	0.562 ng	1.125 ng/g	
MHG7-011018-1	11	3	3	PBT-3	0.025 mL	0.4	1	0.5000 g	40.0 mL	0.0001 ng	3.515 ng/L		3.515 ng/L	0.141 ng	0.281 ng/g	
MHG7-011018-1	12	4	4	PBT-4	0.025 mL	0.7	1	0.5000 g	40.0 mL	0.0004 ng	14.059 ng/L		14.059 ng/L	0.562 ng	1.125 ng/g	Mean=0.844 ng/g ±0.398
MHG7-011018-1	13	5	1	DORM-2	0.025 mL	160.0	1/4	0.2003 g	40.0 mL	0.1403 ng	22452.584 ng/L	1	22442.039 ng/L	897.682 ng	4481.685 ng/g	100.3 %Rec
MHG7-011018-1	14	6	2	L3739-10	0.025 mL	19.7	1	0.5024 g	40.0 mL	0.0170 ng	681.872 ng/L	1	671.328 ng/L	26.853 ng	53.450 ng/g	ECORP 9/21 RERUN
MHG7-011018-1	15	7	3	L3739-10 MD	0.025 mL	22.6	1	0.4880 g	40.0 mL	0.0196 ng	783.802 ng/L	1	773.257 ng/L	30.930 ng	63.382 ng/g	Mean=58.416 ng/g 17.0 RPD
MHG7-011018-1	16	8	4	L3739-10 MS + 174.3 ng/g	0.025 mL	90.0	1	0.4819 g	40.0 mL	0.0788 ng	3152.781 ng/L	1	3142.237 ng/L	125.689 ng	260.821 ng/g	Net=202.405 ng/g 116.1 %Rec
MHG7-011018-1	17	1	1	L3739-10 MSD + 166.07 ng/g	0.025 mL	84.0	1	0.5058 g	40.0 mL	0.0735 ng	2941.893 ng/L	1	2931.349 ng/L	117.254 ng	231.819 ng/g	Net=173.403 ng/g 104.4 %Rec 10.6 RPD
MHG7-011018-1	18	2	2	CCV1	50.000 mL	120.0	1			0.1052 ng	2.104 ng/L		2.104 ng/L			105.2 %Rec
MHG7-011018-1	19	3	3	CCB1	50.000 mL	0.4	1			0.0004 ng	0.007 ng/L		0.007 ng/L			
MHG7-011018-1	20	4	4	L3739-11	0.025 mL	25.2	1	0.5003 g	40.0 mL	0.0219 ng	875.187 ng/L	1	864.642 ng/L	34.586 ng	69.130 ng/g	
MHG7-011018-1	21	5	1	L3739-12	0.025 mL	20.0	1	0.5124 g	40.0 mL	0.0173 ng	692.417 ng/L	1	681.872 ng/L	27.275 ng	53.230 ng/g	
MHG7-011018-1	22	6	2	L3739-13	0.025 mL	32.8	1	0.4970 g	40.0 mL	0.0286 ng	1142.312 ng/L	1	1131.768 ng/L	45.271 ng	91.088 ng/g	
MHG7-011018-1	23	7	3	L3739-14	0.025 mL	32.9	1	0.5105 g	40.0 mL	0.0286 ng	1145.827 ng/L	1	1135.282 ng/L	45.411 ng	88.955 ng/g	
MHG7-011018-1	24	8	4	L3739-15	0.025 mL	40.0	1	0.4983 g	40.0 mL	0.0349 ng	1395.378 ng/L	1	1384.834 ng/L	55.393 ng	111.165 ng/g	
MHG7-011018-1	25	1	1	L3739-16	0.025 mL	19.8	1	0.4852 g	40.0 mL	0.0171 ng	685.387 ng/L	1	674.843 ng/L	26.994 ng	55.634 ng/g	
MHG7-011018-1	26	2	2	L3739-17	0.025 mL	11.8	1	0.5000 g	40.0 mL	0.0101 ng	404.203 ng/L	1	393.658 ng/L	15.746 ng	31.493 ng/g	
MHG7-011018-1	27	3	3	CCV2	50.000 mL	118.0	1			0.1034 ng	2.068 ng/L		2.068 ng/L			103.4 %Rec
MHG7-011018-1	28	4	4	CCB2	50.000 mL	0.3	1			0.0003 ng	0.005 ng/L		0.005 ng/L			

PBT-4

PBT-3

PBT-2

PBT-1

ML SPIKE

ICB

ICV/DORM-2

0.010 sec

← H₂ (II) peak for 0.200 sec ST-2

Pen came off paper

0.200 sec

0.100 sec

0.050 sec

0.005 sec

X=20

X=1

Chart speed=

1 mm/min

JACOB MEYER

MIL 57-011018-1

10/18/01

Jacob Meyer

START 10.05

END 15:29

CCB3

CCV2

L3739-17

L3739-16

L3739-15

L3739-14

L3739-13

L3739-12

L3739-11

CCB1

CCV1

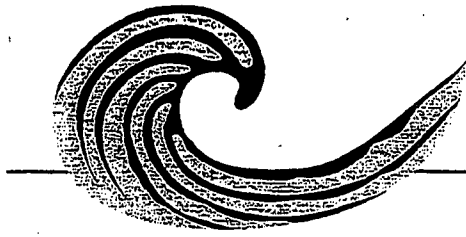
L3739-10 MSD

L3739-10 MS

L3739-10 MD

L3739-10

DORM-2



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Dataset Cover Page

Dataset ID: HG(II)5-011009-1

Hg(II) analysis

Analyst: HolsmanData Analysis: Holsman

Client/Project Name*

Ecorp/Axys (9/21/01)*Clients with name in **bold** are **High QA**

Analytical Issues/explanations:

All results are bubbler blank corrected, except for samples with ID #'s of: ICB, CCB, or BB.

A recovery of approximately 170 ng/g was expected from the Dorm-2 digest. The recovery was 142.1% of this value. Adding the previously obtained value for the methyl mercury content of the standard to this Hg(II) value yields 4509.12 ng/g, or 97.2% of the certified total mercury value of 4640 ng (see MHg1-011004-1). Since the standard is not certified for Hg(II) content, the total mercury recovery will be considered a sufficient demonstration of the standard's suitability.

QUALITY ASSURANCE
PEER-REVIEWED

INITIALS: SNC 10/10/01

Frontier Geosciences

Analysis Datasheet for Total Mercury

Date of Analysis: Oct 09, 2001

Instrument #: CVAFS-5

Calibration #: 1

Analyst: Holsman

Project(s): Ecorp/Axis (9/21/01)

FGS Dataset ID: HG(II)5-011009-1

Calibration Statistics:

True Val	PA	PA-BB	Calc Values	
0.10 ng	71.41	69.36	0.099 ng	69.83
0.50 ng	340.16	338.11	0.484 ng	349.15
2.00 ng	1460.18	1458.13	2.088 ng	1396.58
4.00 ng	2765.76	2763.71	3.958 ng	2793.17
0.05 ng	42.88	40.83	0.058 ng	34.91

Slope: 698.3 units/ng

SE: ±31.03

R2: 0.9991

R: 0.9996

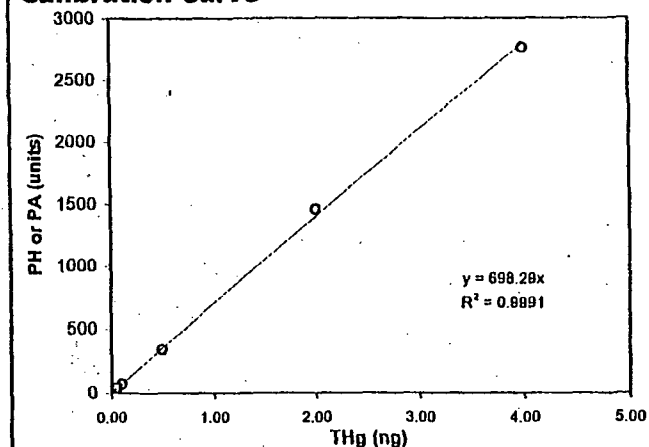
Obs: 5

Blanks:

PB#	Sample ID	n	Mean	Std Dev
-	ICB			
-	CCB			
-	BB	3	2.05 units	±1.85
1	PBT	4	6.081 ng/L	±1.374
2				

Mean=0.029 ng/L ±0.027

Calibration Curve



Lab Control Samples:

Run#	Sample ID	Conc	Dil Factor	True Val	Rec
1129	ICV/NIST	1557771 ng/L	100000	1590000 ng/L	98.0% (NIST 1641d)
1136	Dorm-2 digest	242 ng/L	1	170 ng/L	142.1%

see cover sheet

Laboratory Standards

Type	Concentration	ID Number
Calibration	10 ng/mL	Hg2-13-11
ICV (NIST 1641d)	1.59 mg/L	HG2-11-9
MS/MSD	1000 ng/mL	Dungeon Standard #1
		10/6/99 NSB

ML Spikes:

Matrix	Digestion	ML Conc. (ng/g or ng/L)	True Value (ng/g or ng/L)
Tissue	KOH/MeOH	38.915	44 ng/g

Name: Connor Christy Date: 10-5-01 final volume: _____
Client Name: E Corp (AxyS) (9.21.01) and ~~GA (9.4.01)~~ rev 10/4/01
Sample Matrix: ☐ Sediments ☐ Waters ☒ Tissues ☐ Iodated Carbon ☐ Filters ☐ Other _____
Analysis: ☐ Total Hg ☒ Methyl Hg ☐ % Dry Weight ☐ Other _____

Pan For MS	Sample ID Number	Sample Size [g] [mL]	Dry Weight Determination Pan #1 Pan #2 Pan #3 Sample (g) Sample (g)
	PBT 1		
	PBT 2		
	PBT 3		
	PBT 4		
	TORT-2	0.2152 — ①	
	TORT-2a	0.2056 — ①	
	TORT-2b	0.1913 — ①	① TCH 10/9/01
	TORT-2MS	0.1970 — ①	
	TORT-2MSD	0.1946 — ①	
	ML (80 mL of 100 mg/mL) + NIST 1515	0.2011	
	DORM-2	0.2003	
	L3739-10	0.5024	
	I MD	0.4880	
	I MS	0.4819	
	I MSD	0.5058	
	L3739-11	0.5003	
	L3739-12	0.5124	
	L3739-13	0.4970	
	L3739-14	0.5105	
	L3739-15	0.4983	
	L3739-16	0.4852	
	L3739-17	0.5000	
<i>all</i> <i>10-3-01</i>			

*
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*
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*
*
*
*
*

TH95-011009-1 start @ 7:45 AM

Tibias *(H. G. Mann)*

* RUN # 1124 JAN 28, 1901 23:16:33
START

IF
21833
TIMETABLE STOP

RUN# 1124 JAN 28, 1901 23:16:33

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.833	71412 PU	.137	100.00000

TOTAL AREA= 71412
MUL FACTOR=1.00000E+00

* RUN # 1125 JAN 28, 1901 23:22:28
START

IF
2.801
TIMETABLE STOP

RUN# 1125 JAN 28, 1901 23:22:28

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.801	340160 UU	.136	100.00000

TOTAL AREA= 340160
MUL FACTOR=1.00000E+00

* RUN # 1126 JAN 28, 1901 23:28:12
START

IF
2.823
TIMETABLE STOP

RUN# 1126 JAN 28, 1901 23:28:12

AREAX

0020

TOTAL AREA=1460184
MUL FACTOR=1.0000E+00

* RUN # 1127 JAN 28, 1981 23:39:40
START

FF

2.774

TIMETABLE STOP

RUN# 1127 JAN 28, 1981 23:39:40

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.774	2765758 PB	.134	100.00000

TOTAL AREA=2765758
MUL FACTOR=1.0000E+00

* RUN # 1128 JAN 28, 1981 23:57:02
START

FF

2.800

TIMETABLE STOP

RUN# 1128 JAN 28, 1981 23:57:02

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.800	42884 PU	.134	100.00000

TOTAL AREA= 42884
MUL FACTOR=1.0000E+00

* RUN # 1129 JAN 29, 1981 00:04:54
START

FF

2.781

TIMETABLE STOP

RUN# 1129 JAN 29, 1981 00:04:54

0021

AREAX

TOTAL AREA=1068499
MUL FACTOR=1.0000E+00

* RUN# 1130 JAN 29, 1981 00:15:42
START

IF
2.807
TIMETABLE STOP

RUN# 1130 JAN 29, 1981 00:15:42

AREAZ
RT AREA TYPE WIDTH AREAZ
2.807 2549 BP .109 100.00000

TOTAL AREA= 2549
MUL FACTOR=1.0000E+00

* RUN# 1131 JAN 29, 1981 00:25:06
START

IF
2.829
TIMETABLE STOP

RUN# 1131 JAN 29, 1981 00:25:06

AREAZ
RT AREA TYPE WIDTH AREAZ
2.829 7511 PU .132 100.00000

TOTAL AREA= 7511
MUL FACTOR=1.0000E+00

* RUN# 1132 JAN 29, 1981 00:31:30
START

IF
2.813
TIMETABLE STOP

RUN# 1132 JAN 29, 1981 00:31:30

AREAZ

0022

TOTAL AREA= 5283
MUL FACTOR=1.0000E+00

* RUN # 1133 JAN 29, 1901 01:07:38

START

IF

2.796

TIMETABLE STOP

RUN# 1133 JAN 29, 1901 01:07:38

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.796	5850 PU	.138	100.00000

TOTAL AREA= 5850
MUL FACTOR=1.0000E+00

* RUN # 1134 JAN 29, 1901 01:12:37

START

IF

2.776

TIMETABLE STOP

RUN# 1134 JAN 29, 1901 01:12:37

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.776	6539 PU	.141	100.00000

TOTAL AREA= 6539
MUL FACTOR=1.0000E+00

* RUN # 1135 JAN 29, 1901 01:27:17

START

IF

2.804

TIMETABLE STOP

RUN# 1135 JAN 29, 1901 01:27:17

0023

AREAX

TOTAL AREA= 142912
MUL FACTOR=1.00000E+00

* RUN# 1136 JAN 29, 1901 01:33:13
START

PF

2.870

TIMETABLE STOP

RUN# 1136 JAN 29, 1901 01:33:13

AREA#	RT	AREA TYPE	WIDTH	AREA#
2.870	851282	PS	.142	100.00000

TOTAL AREA= 851282
MUL FACTOR=1.00000E+00

* RUN# 1137 JAN 29, 1901 01:40:33
START

IF

2.880

TIMETABLE STOP

RUN# 1137 JAN 29, 1901 01:40:33

AREA#	RT	AREA TYPE	WIDTH	AREA#
2.880	15900	UU	.142	100.00000

TOTAL AREA= 15900
MUL FACTOR=1.00000E+00

* RUN# 1138 JAN 29, 1901 01:52:04
START

PF

2.895

TIMETABLE STOP

RUN# 1138 JAN 29, 1901 01:52:04
0024

AREA#

TOTAL AREA= 18574
MUL FACTOR=1.0000E+00

* RUN # 1139 JAN 29, 1901 02:10:16

START

IF

2.824

TIMETABLE STOP

RUN# 1139 JAN 29, 1901 02:10:16

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.824	18848	PU .137	100.00000

TOTAL AREA= 18848

MUL FACTOR=1.0000E+00

* RUN # 1140 JAN 29, 1901 02:20:48

START

IF

2.856

TIMETABLE STOP

RUN# 1140 JAN 29, 1901 02:20:48

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.856	19200	PU .139	100.00000

TOTAL AREA= 19200

MUL FACTOR=1.0000E+00

* RUN # 1141 JAN 29, 1901 02:32:22

START

IF

TIMETABLE STOP

2.875

RUN# 1141 JAN 29, 1901 02:32:22

0025

AREAX

TOTAL AREA=1419841
MUL FACTOR=1.0000E+00

* RUN# 1142 JAN 29, 1981 02:47:37

START

IF

TIMETABLE STOP

RUN# 1142 JAN 29, 1981 02:47:37

NO RUN PEAKS STORED

* RUN# 1143 JAN 29, 1981 03:02:25

START

IF

2.560

TIMETABLE STOP

RUN# 1143 JAN 29, 1981 03:02:25

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.560	21574	UU	.139 100.00000

TOTAL AREA= 21574

MUL FACTOR=1.0000E+00

* RUN# 1144 JAN 29, 1981 03:10:33

START

IF

2.810

TIMETABLE STOP

RUN# 1144 JAN 29, 1981 03:10:33

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.810	22791	FU	.139 100.00000

TOTAL AREA= 22791

MUL FACTOR=1.0000E+00

* RUN# 1145 JAN 29, 1981 03:22:20

START

IF

2.681

TIMETABLE STOP

RUN# 1145 JAN 29, 1981 03:22:20

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.681	34953	UU	.141 100.00000

TOTAL AREA= 34953

MUL FACTOR=1.00000E+00

* RUN# 1146 JAN 29, 1981 04:31:39

START

IF

2.825

TIMETABLE STOP

RUN# 1146 JAN 29, 1981 04:31:39

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.825	14984	UU	.137 100.00000

TOTAL AREA= 14984

MUL FACTOR=1.00000E+00

* RUN # 1147 JAN 29, 1981 04:54:52

START

IF

2.844

TIMETABLE STOP

RUN# 1147 JAN 29, 1981 04:54:52

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.844	22142	PU	.140 100.00000

TOTAL AREA= 22142

MUL FACTOR=1.00000E+00

* RUN # 1148 JAN 29, 1901 05:01:48

START

IT
2.839
TIMETABLE STOP

RUN# 1148 JAN 29, 1901 05:01:48

AREAX

RT	AREA TYPE	WIDTH	AREAX
21839	106391	PU .140	100.00000

TOTAL AREA= 106391

MUL FACTOR=1.00000E+00

* RUN # 1149 JAN 29, 1901 05:07:42

START

IT
2.829
TIMETABLE STOP

RUN# 1149 JAN 29, 1901 05:07:42

AREAX

RT	AREA TYPE	WIDTH	AREAX
21829	110209	PU .138	100.00000

TOTAL AREA= 110209

MUL FACTOR=1.00000E+00

* RUN # 1150 JAN 29, 1901 05:19:56

START

IT
2.867
TIMETABLE STOP

RUN# 1150 JAN 29, 1901 05:19:56

AREAX

RT	AREA TYPE	WIDTH	AREAX
21867	2414797	PB .140	100.00000

TOTAL AREA= 2414797

MUL FACTOR=1.00000E+00

* RUN# 1151 JAN 29, 1981 05:59:07

START

IF

2.825

TIMETABLE STOP

RUN# 1151 JAN 29, 1981 05:59:07

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.825	4547 PU	.142	100.00000

TOTAL AREA= 4547
MUL FACTOR=1.00000E+00

* RUN# 1152 JAN 29, 1981 05:11:26

START

IF

2.834

TIMETABLE STOP

RUN# 1152 JAN 29, 1981 05:11:26

AREAX

RT	AREA TYPE	WIDTH	AREAX
2.834	1427146 PB	.138	100.00000

TOTAL AREA=1427146
MUL FACTOR=1.00000E+00

* RUN# 1153 JAN 29, 1981 06:20:54

START

IF

2.811

TIMETABLE STOP

RUN# 1153 JAN 29, 1981 06:20:54

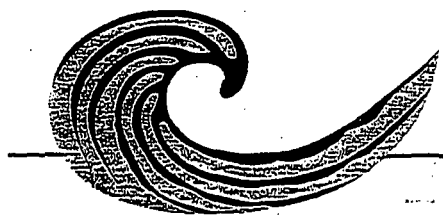
AREAX

RT	AREA TYPE	WIDTH	AREAX
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TOTAL AREA= 3600
MUL FACTOR=1.00000E+00

0029

finish @ 4:00 PM



FRONTIER GEOSCIENCES

ENVIRONMENTAL RESEARCH CORPORATION

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Dataset Cover Page

Dataset ID: ICP1-011010-1

Analyst: ABN

Data Analysis: ABN

Client/Project Name	QC Level
[REDACTED]	STANDARD
[REDACTED]	STANDARD
[REDACTED]	STANDARD
[REDACTED] 6	STANDARD
ECORP 9/21 (TISSUE-HNO3)	HIGH
[REDACTED]	HIGH
[REDACTED]	HIGH
[REDACTED]	STANDARD

Analytical Issues:

[REDACTED]
P.16 Se, Cd MD RPD high, mean levels < 2x Est MDL. *ok*

P.16 Al MS recovery high (RPD high), MSD in control. QC for all other analytes *Al spiked < ambient*.
in control.

P.19 Se Diss > Tot for AMR BLANK-MW5, difference < EstMDL. *ok*

[REDACTED]
P.35 See Tot/Diss noted issues.

* MSA slope was not applied to data. MD and MS/MSD in control.

ECORP 9/21 (TISSUE-HNO3)

[REDACTED]
* No QC issues.

* HNO3 tissue digest and HCl tissue digest results demonstrate almost identical results.

[REDACTED]
* All recoveries in control except for Cd in MESS-2 (70%Rec). This digest was analyzed after 2% mix matrix samples previously. Analyst suspects possible interference on the SRM's which showed biased high recoveries in previous analysis.

QUALITY ASSURANCE
PEER-REVIEWED

INITIALS: SNC 10/15/01

ICP Analysis Dataset Summary

Clients:

Dataset: ICP1-011010-1

Analyst: ABN

Date: Oct 10, 2001

Dataset Notes:

Batch 2 - Inst Blank Set

Analyte	IB1 ug/L	IB2 ug/L	IB3 ug/L	IB4 ug/L	n	Average	St Dev	EMDL	Eff Factor
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Batch 2 - Prep Blank Set

Analyte	PB1 ug/L	PB2 ug/L	PB3 ug/L	PB4 ug/L	n	Average	St Dev	EMDL	Eff Factor
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Blank

No Dilution						Total Solids: 100.00%		10/10/01 9:17:53		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc	45	1380986.3750				1.0000			100.0%	
> In	115	3177913.2500				1.0000			100.0%	
> Pt	195	582535.8750				1.0000			100.0%	

Standard 1

No Dilution						Total Solids: 100.00%		10/10/01 8:16:59		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be	9	0.1157	0.1157			1.0000				
→ Al	27	5.6936	5.6936			1.0000				
> Sc	45	1408075.2500				1.0000			102.0%	
→ Cr	52	0.1397	0.1397			1.0000				
Cr	53	0.2650	0.2650			1.0000				
→ Ni	60	0.0986	0.0986			1.0000				
Ni	62	0.0331	0.0331			1.0000				
→ Cu	65	0.1053	0.1053			1.0000				
→ - Cu	63	0.1032	0.1032			1.0000				
→ - Zn	86	0.3669	0.3669			1.0000				
→ Zn-1	68	0.3873	0.3873			1.0000				
→ Zn	68	0.3884	0.3884			1.0000				
→ As-1	75	0.5432	0.5432			1.0000				
→ As	75	0.5617	0.5617			1.0000				
Se	77	0.4835	0.4835			1.0000				
→ Se	82	0.5063	0.5063			1.0000				
→ Ag	107	0.0516	0.0516			1.0000				
Ag	109	0.0495	0.0495			1.0000				
→ Cd	111	0.0448	0.0448			1.0000				
→ Cd-1	114	0.0567	0.0567			1.0000				
→ Cd	114	0.0550	0.0550			1.0000				
> In	115	3125801.5000				1.0000			98.4%	
→ Sb	121	0.0203	0.0203			1.0000				
- Sb	123	0.0215	0.0215			1.0000				
> Pt	195	586073.1875				1.0000			100.6%	
→ Ti	205	0.0215	0.0215			1.0000				
→ - Pb	208	0.0293	0.0293			1.0000				

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

Standard 2

No. Dilution						Total Solids:	100.00%	10/10/01 8:22:03		
Analyte		Raw Conc ug/L	Last Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be	9	0.2369	0.2369				1.0000			
→ Al	27	27.4382	27.4382				1.0000			
> Sc	45	1409173.1250					1.0000			102.0%
→ Cr	52	5.1981	5.1981				1.0000			
→ Cr	53	5.2241	5.2241				1.0000			
→ Ni	60	2.5317	2.5317				1.0000			
→ Ni	62	2.5280	2.5280				1.0000			
→ Cu	65	2.5690	2.5690				1.0000			
→ - Cu	63	2.5641	2.5641				1.0000			
→ - Zn	66	5.2485	5.2485				1.0000			
→ Zn-1	68	5.5061	5.5061				1.0000			
→ Zn	68	5.4057	5.4057				1.0000			
→ As-1	75	5.2861	5.2861				1.0000			
→ As	75	5.3399	5.3399				1.0000			
→ Se	77	5.2389	5.2389				1.0000			
→ Se	82	5.1778	5.1778				1.0000			
→ Ag	107	0.5505	0.5505				1.0000			
→ Ag	109	0.5506	0.5506				1.0000			
→ Cd	111	0.5111	0.5111				1.0000			
→ Cd-1	114	0.5299	0.5299				1.0000			
→ Cd	114	0.5325	0.5325				1.0000			
> In	115	3163939.2500					1.0000			99.6%
→ Sb	121	0.2682	0.2682				1.0000			
- Sb	123	0.2691	0.2691				1.0000			
> Pt	195	599329.3125					1.0000			102.9%
→ Tl	205	0.2643	0.2643				1.0000			
→ - Pb	208	0.5024	0.5024				1.0000			

Standard 3

No. Dilution						Total Solids:	100.00%	10/10/01 8:27:08		
Analyte		Raw Conc ug/L	Last Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be	9	0.5231	0.5231				1.0000			
→ Al	27	52.0550	52.0550				1.0000			
> Sc	45	1405318.6250					1.0000			101.8%
→ Cr	52	10.3167	10.3167				1.0000			
→ Cr	53	10.2045	10.2045				1.0000			
→ Ni	60	10.0295	10.0295				1.0000			
→ Ni	62	10.1241	10.1241				1.0000			
→ Cu	65	10.3356	10.3356				1.0000			
→ - Cu	63	10.3492	10.3492				1.0000			
→ - Zn	66	20.8384	20.8384				1.0000			
→ Zn-1	68	21.0928	21.0928				1.0000			
→ Zn	68	21.1071	21.1071				1.0000			
→ As-1	75	10.4338	10.4338				1.0000			
→ As	75	10.5677	10.5677				1.0000			
→ Se	77	10.2121	10.2121				1.0000			
→ Se	82	10.4880	10.4880				1.0000			
→ Ag	107	1.0573	1.0573				1.0000			
→ Ag	109	1.0661	1.0661				1.0000			
→ Cd	111	1.0031	1.0031				1.0000			
→ Cd-1	114	1.0073	1.0073				1.0000			
→ Cd	114	1.0051	1.0051				1.0000			
> In	115	3179601.0000					1.0000			100.1%
→ Sb	121	0.5192	0.5192				1.0000			
- Sb	123	0.5215	0.5215				1.0000			
> Pt	195	593364.6875					1.0000			101.9%
→ Tl	205	0.4907	0.4907				1.0000			
→ - Pb	208	2.0497	2.0497				1.0000			

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

Standard 4

No. Dilution						Total Solids:	100.00%	10/10/01 8:32:14		
Analyte		Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be	9	2.4965	2.4965				1.0000			
→ Al	27	251.0025	251.0025				1.0000			
> Sc	45	1428523.6250					1.0000			103.4%
→ Cr	52	51.3783	51.3783				1.0000			
Cr	53	50.8865	50.8865				1.0000			
→ Ni	60	50.2791	50.2791				1.0000			
Ni	62	50.2115	50.2115				1.0000			
→ Cu	65	50.4394	50.4394				1.0000			
→ - Cu	63	50.2409	50.2409				1.0000			
→ - Zn	66	101.1198	101.1198				1.0000			
→ Zn-1	68	102.0874	102.0874				1.0000			
→ Zn	68	102.1175	102.1175				1.0000			
As-1	75	51.7919	51.7919				1.0000			
→ As	75	51.8013	51.8013				1.0000			
Se	77	50.8542	50.8542				1.0000			
→ Se	82	50.2407	50.2407				1.0000			
→ Ag	107	5.1936	5.1936				1.0000			
Ag	109	5.2298	5.2298				1.0000			
→ Cd	111	5.0708	5.0708				1.0000			
→ Cd-1	114	5.0594	5.0594				1.0000			
→ Cd	114	5.0725	5.0725				1.0000			
> In	115	3259870.0000					1.0000			102.6%
→ Sb	121	2.6003	2.6003				1.0000			
- Sb	123	2.5824	2.5824				1.0000			
> Pt	195	609005.8125					1.0000			104.5%
→ Tl	205	2.5472	2.5472				1.0000			
→ - Pb	208	10.1774	10.1774				1.0000			

Standard 5

No. Dilution						Total Solids:	100.00%	10/10/01 8:37:21		
Analyte		Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be	9	4.7617	4.7617				1.0000			
→ Al	27	534.9130	534.9130				1.0000			
> Sc	45	1419799.0000					1.0000			102.9%
→ Cr	52	102.5826	102.5826				1.0000			
Cr	53	102.8689	102.8689				1.0000			
→ Ni	60	99.8660	99.8660				1.0000			
Ni	62	99.8931	99.8931				1.0000			
→ Cu	65	99.7537	99.7537				1.0000			
→ - Cu	63	99.8505	99.8505				1.0000			
→ - Zn	66	199.3929	199.3929				1.0000			
→ Zn-1	68	198.8759	198.8759				1.0000			
→ Zn	68	198.8623	198.8623				1.0000			
As-1	75	101.7503	101.7503				1.0000			
→ As	75	101.9502	101.9502				1.0000			
Se	77	99.5866	99.5866				1.0000			
→ Se	82	99.8663	99.8663				1.0000			
→ Ag	107	10.3478	10.3478				1.0000			
Ag	109	10.4254	10.4254				1.0000			
→ Cd	111	9.9673	9.9673				1.0000			
→ Cd-1	114	9.9720	9.9720				1.0000			
→ Cd	114	9.9657	9.9657				1.0000			
> In	115	3317629.0000					1.0000			104.4%
→ Sb	121	5.1385	5.1385				1.0000			
- Sb	123	5.1188	5.1188				1.0000			
> Pt	195	616508.5000					1.0000			105.8%
→ Tl	205	5.1009	5.1009				1.0000			
→ - Pb	208	20.3668	20.3668				1.0000			

0033

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

Standard 6

No. Dilution		Total Solids: 100.00%				10/10/01 8:42:28			
Analyte		Raw Conc. ug/L	Inst. Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be	9	8.2242	8.2242				1.0000		
→ Al	27	1999.8164	1999.8164				1.0000		
> Sc	45	1475276.0000					1.0000		106.8%
→ Cr	52	198.3408	198.3408				1.0000		
Cr	53	198.4201	198.4201				1.0000		
→ Ni	60	238.0127	238.0127				1.0000		
Ni	62	237.3789	237.3789				1.0000		
→ Cu	65	238.0661	238.0661				1.0000		
→ - Cu	63	235.4240	235.4240				1.0000		
→ - Zn	66	475.1266	475.1266				1.0000		
→ Zn-1	68	480.7860	480.7860				1.0000		
→ Zn	68	475.1732	475.1732				1.0000		
→ As-1	75	198.6543	198.6543				1.0000		
→ As	75	198.5664	198.5664				1.0000		
Se	77	193.6918	193.6918				1.0000		
→ Se	82	192.3631	192.3631				1.0000		
→ Ag	107	39.8875	39.8875				1.0000		
Ag	109	39.8633	39.8633				1.0000		
→ Cd	111	19.2046	19.2046				1.0000		
→ Cd-1	114	19.1240	19.1240				1.0000		
→ Cd	114	19.1520	19.1520				1.0000		
> In	115	3439072.7500					1.0000		108.2%
→ Sb	121	9.9051	9.9051				1.0000		
- Sb	123	9.9191	9.9191				1.0000		
> Pt	195	618577.3125					1.0000		106.2%
→ Ti	205	9.9387	9.9387				1.0000		
→ - Pb	208	49.8166	49.8166				1.0000		

ICV

No. Dilution		Total Solids: 100.00%				10/10/01 8:52:36			
Analyte		Raw Conc. ug/L	Inst. Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be	9	4.5728	4.5728				1.0000		5.000 91.5%
→ Al	27	517.5593	517.5593				1.0000		500.000 103.5%
> Sc	45	1446795.2500					1.0000		104.8%
→ Cr	52	50.3398	50.3398				1.0000		50.000 100.7%
Cr	53	50.6705	50.6705				1.0000		50.000 101.3%
→ Ni	60	49.8417	49.8417				1.0000		50.000 99.7%
Ni	62	49.7755	49.7755				1.0000		50.000 99.6%
→ Cu	65	49.2942	49.2942				1.0000		50.000 98.6%
→ - Cu	63	49.3138	49.3138				1.0000		50.000 98.6%
→ - Zn	66	50.8026	50.8026				1.0000		50.000 101.6%
→ Zn-1	68	53.8257	53.8257				1.0000		50.000 107.7%
→ Zn	68	50.8713	50.8713				1.0000		50.000 101.7%
As-1	75	50.3915	50.3915				1.0000		50.000 100.8%
→ As	75	50.1974	50.1974				1.0000		50.000 100.4%
Se	77	50.0345	50.0345				1.0000		50.000 100.1%
→ Se	82	48.9366	48.9366				1.0000		50.000 97.9%
→ Ag	107	5.2873	5.2873				1.0000		5.000 105.7%
Ag	109	5.2594	5.2594				1.0000		5.000 105.2%
→ Cd	111	4.9293	4.9293				1.0000		5.000 98.6%
→ Cd-1	114	4.8791	4.8791				1.0000		5.000 97.6%
→ Cd	114	4.8478	4.8478				1.0000		5.000 97.0%
> In	115	3333626.2500					1.0000		104.9%
→ Sb	121	5.1206	5.1206				1.0000		5.000 102.4%
- Sb	123	5.1293	5.1293				1.0000		5.000 102.6%
> Pt	195	614470.1875					1.0000		105.5%
→ Ti	205	5.0686	5.0686				1.0000		5.000 101.4%
→ - Pb	208	4.9327	4.9327				1.0000		5.000 98.7%

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

ICB

No. Dilution		Total Solids: 100.00%				10/10/01 8:57:42			
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ Be 9	0.0007	0.0007				1.0000			
→ Al 27	0.0108	0.0108				1.0000			
> Sc 45	1423169.7500					1.0000			103.1%
→ Cr 52	0.0295	0.0295				1.0000			
→ Cr 53	0.0263	0.0263				1.0000			
→ Ni 60	0.0018	0.0018				1.0000			
→ Ni 62	-0.0283	-0.0283				1.0000			
→ Cu 65	0.0019	0.0019				1.0000			
→ Cu 63	0.0058	0.0058				1.0000			
→ Zn 66	0.0112	0.0112				1.0000			
→ Zn-1 68	-0.0055	-0.0055				1.0000			
→ Zn 68	-0.0061	-0.0061				1.0000			
→ As-1 75	-0.0962	-0.0962				1.0000			
→ As 75	0.0322	0.0322				1.0000			
→ Se 77	-0.0441	-0.0441				1.0000			
→ Se 82	0.0469	0.0469				1.0000			
→ Ag 107	0.0094	0.0094				1.0000			
→ Ag 109	0.0082	0.0082				1.0000			
→ Cd 111	-0.0039	-0.0039				1.0000			
→ Cd-1 114	0.0000	0.0000				1.0000			
→ Cd 114	-0.0020	-0.0020				1.0000			
> In 115	3253180.5000					1.0000			102.4%
→ Sb 121	0.0031	0.0031				1.0000			
→ Sb 123	0.0030	0.0030				1.0000			
> Pt 195	598697.8125					1.0000			102.8%
→ Tl 205	0.0003	0.0003				1.0000			
→ Pb 208	0.0012	0.0012				1.0000			

Batch 3 - Inst Blank Set

Analyte	IB1 ug/L	IB2 ug/L	IB3 ug/L	IB4 ug/L	n	Average	StDev	EMDL	Eff Factor
→ Be 9	0.0016	0.0058	0.0041	0.0000	4	0.0029	0.0026	0.0077	1.0000
→ Al 27	0.0144	0.0090	0.0035	0.0000	4	0.0067	0.0063	0.0189	1.0000
→ Cr 52	0.0096	0.0134	0.0036	0.0000	4	0.0067	0.0060	0.0179	1.0000
→ Cr 53	0.0549	-0.0047	-0.0129	0.0026	4	0.0100	0.0306	0.0919	1.0000
→ Ni 60	0.0006	0.0001	0.0003	0.0000	4	0.0003	0.0003	0.0008	1.0000
→ Ni 62	-0.0077	0.0115	-0.0056	-0.0002	4	-0.0005	0.0086	0.0258	1.0000
→ Cu 63	0.0037	-0.0005	-0.0021	0.0000	4	0.0003	0.0025	0.0074	1.0000
→ Cu 65	0.0012	-0.0010	-0.0031	0.0000	4	-0.0007	0.0018	0.0054	1.0000
→ Zn 66	0.0056	0.0337	0.0143	-0.0001	4	0.0134	0.0148	0.0443	1.0000
→ Zn 68	0.0016	0.0360	0.0115	0.0001	4	0.0123	0.0166	0.0497	1.0000
→ Zn-1 68	0.0018	0.0352	0.0122	0.0001	4	0.0123	0.0162	0.0485	1.0000
→ As 75	0.0416	0.0322	0.0103	-0.0004	4	0.0209	0.0193	0.0580	1.0000
→ As-1 75	-0.0998	-0.0315	-0.0013	-0.0001	4	-0.0332	0.0467	0.1402	1.0000
→ Se 77	-0.0453	-0.0737	0.0201	0.0017	4	-0.0243	0.0430	0.1289	1.0000
→ Se 82	0.1118	-0.0227	0.0142	-0.0001	4	0.0258	0.0593	0.1780	1.0000
→ Ag 107	0.0031	0.0017	0.0016	0.0000	4	0.0016	0.0013	0.0038	1.0000
→ Ag 109	0.0026	0.0016	-0.0001	0.0000	4	0.0010	0.0013	0.0040	1.0000
→ Cd 111	-0.0003	-0.0032	-0.0039	0.0000	4	-0.0018	0.0020	0.0060	1.0000
→ Cd-1 114	0.0009	0.0014	0.0021	0.0000	4	0.0011	0.0009	0.0027	1.0000
→ Cd 114	0.0013	-0.0013	-0.0006	0.0000	4	-0.0001	0.0011	0.0033	1.0000
→ Sb 121	0.0005	-0.0004	0.0001	0.0000	4	0.0001	0.0004	0.0012	1.0000
→ Sb 123	0.0004	-0.0002	-0.0008	0.0000	4	-0.0002	0.0005	0.0014	1.0000
→ Tl 205	-0.0002	0.0004	0.0001	0.0000	4	0.0001	0.0003	0.0008	1.0000
→ Pb 208	-0.0009	-0.0008	0.0009	0.0000	4	-0.0002	0.0008	0.0025	1.0000

Batch 3 - Prep Blank Set

Analyte	PB1 ug/L	PB2 ug/L	PB3 ug/L	PB4 ug/L	n	Average	StDev	EMDL	Eff Factor
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0035

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

IBW1

No. Dilution		Total Solids: 100.00%				10/10/01 9:02:44			
Analyte		Raw Conc ug/L	Inst. Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be	9	0.0016	0.0016				1.0000		
→ Al	27	0.0144	0.0144				1.0000		
> Sc	45	1393259.2500					1.0000		100.9%
→ Cr	52	0.0096	0.0096				1.0000		
Cr	53	0.0549	0.0549				1.0000		
→ Ni	60	0.0006	0.0006				1.0000		
Ni	62	-0.0077	-0.0077				1.0000		
→ Cu	65	0.0012	0.0012				1.0000		
→ - Cu	63	0.0037	0.0037				1.0000		
→ - Zn	66	0.0056	0.0056				1.0000		
→ Zn-1	68	0.0018	0.0018				1.0000		
→ Zn	68	0.0016	0.0016				1.0000		
As-1	75	-0.0998	-0.0998				1.0000		
→ As	75	0.0416	0.0416				1.0000		
Se	77	-0.0453	-0.0453				1.0000		
→ Se	82	0.1118	0.1118				1.0000		
→ Ag	107	0.0031	0.0031				1.0000		
Ag	109	0.0026	0.0026				1.0000		
→ Cd	111	-0.0003	-0.0003				1.0000		
→ Cd-1	114	0.0009	0.0009				1.0000		
→ Cd	114	0.0013	0.0013				1.0000		
> In	115	3228507.2500					1.0000		101.6%
→ Sb	121	0.0005	0.0005				1.0000		
- Sb	123	0.0004	0.0004				1.0000		
> Pt	195	591631.1250					1.0000		101.6%
→ Tl	205	-0.0002	-0.0002				1.0000		
→ - Pb	208	-0.0009	-0.0009				1.0000		

IBW2

No. Dilution		Total Solids: 100.00%				10/10/01 9:07:47			
Analyte		Raw Conc ug/L	Inst. Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be	9	0.0058	0.0058				1.0000		
→ Al	27	0.0090	0.0090				1.0000		
> Sc	45	1392555.8750					1.0000		100.8%
→ Cr	52	0.0134	0.0134				1.0000		
Cr	53	-0.0047	-0.0047				1.0000		
→ Ni	60	0.0001	0.0001				1.0000		
Ni	62	0.0115	0.0115				1.0000		
→ Cu	65	-0.0010	-0.0010				1.0000		
→ - Cu	63	-0.0005	-0.0005				1.0000		
→ - Zn	66	0.0337	0.0337				1.0000		
→ Zn-1	68	0.0352	0.0352				1.0000		
→ Zn	68	0.0360	0.0360				1.0000		
As-1	75	-0.0315	-0.0315				1.0000		
→ As	75	0.0322	0.0322				1.0000		
Se	77	-0.0737	-0.0737				1.0000		
→ Se	82	-0.0227	-0.0227				1.0000		
→ Ag	107	0.0017	0.0017				1.0000		
Ag	109	0.0016	0.0016				1.0000		
→ Cd	111	-0.0032	-0.0032				1.0000		
→ Cd-1	114	0.0014	0.0014				1.0000		
→ Cd	114	-0.0013	-0.0013				1.0000		
> In	115	3184218.5000					1.0000		100.2%
→ Sb	121	-0.0004	-0.0004				1.0000		
- Sb	123	-0.0002	-0.0002				1.0000		
> Pt	195	589006.6875					1.0000		101.1%
→ Tl	205	0.0004	0.0004				1.0000		
→ - Pb	208	-0.0008	-0.0008				1.0000		

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

IBW3

No. Dilution		Total Solids: 100.00%				10/10/01 9:12:50			
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be 9	0.0041	0.0041				1.0000			
→ Al 27	0.0035	0.0035				1.0000			
> Sc 45	1397218.6250					1.0000			101.2%
→ Cr 52	0.0036	0.0036				1.0000			
Cr 53	-0.0129	-0.0129				1.0000			
→ Ni 60	0.0003	0.0003				1.0000			
Ni 62	-0.0056	-0.0056				1.0000			
→ Cu 65	-0.0031	-0.0031				1.0000			
→ - Cu 63	-0.0021	-0.0021				1.0000			
→ - Zn 66	0.0143	0.0143				1.0000			
→ Zn-1 68	0.0122	0.0122				1.0000			
→ Zn 68	0.0115	0.0115				1.0000			
As-1 75	-0.0013	-0.0013				1.0000			
→ As 75	0.0103	0.0103				1.0000			
Se 77	0.0201	0.0201				1.0000			
→ Se 82	0.0142	0.0142				1.0000			
→ Ag 107	0.0016	0.0016				1.0000			
Ag 109	-0.0001	-0.0001				1.0000			
→ Cd 111	-0.0039	-0.0039				1.0000			
→ Cd-1 114	0.0021	0.0021				1.0000			
→ Cd 114	-0.0006	-0.0006				1.0000			
> In 115	3155714.7500					1.0000			99.3%
→ Sb 121	0.0001	0.0001				1.0000			
- Sb 123	-0.0008	-0.0008				1.0000			
> Pt 195	593581.1875					1.0000			101.9%
→ Tl 205	0.0001	0.0001				1.0000			
→ - Pb 208	0.0009	0.0009				1.0000			

IBW4

No. Dilution		Total Solids: 100.00%				10/10/01 9:17:53			
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
→ - Be 9	0.0000	0.0000				1.0000			
→ Al 27	0.0000	0.0000				1.0000			
> Sc 45	1380986.3750					1.0000			100.0%
→ Cr 52	0.0000	0.0000				1.0000			
Cr 53	0.0026	0.0026				1.0000			
→ Ni 60	0.0000	0.0000				1.0000			
Ni 62	-0.0002	-0.0002				1.0000			
→ Cu 65	0.0000	0.0000				1.0000			
→ - Cu 63	0.0000	0.0000				1.0000			
→ - Zn 66	-0.0001	-0.0001				1.0000			
→ Zn-1 68	0.0001	0.0001				1.0000			
→ Zn 68	0.0001	0.0001				1.0000			
As-1 75	-0.0001	-0.0001				1.0000			
→ As 75	-0.0004	-0.0004				1.0000			
Se 77	0.0017	0.0017				1.0000			
→ Se 82	-0.0001	-0.0001				1.0000			
→ Ag 107	0.0000	0.0000				1.0000			
Ag 109	0.0000	0.0000				1.0000			
→ Cd 111	0.0000	0.0000				1.0000			
→ Cd-1 114	0.0000	0.0000				1.0000			
→ Cd 114	0.0000	0.0000				1.0000			
> In 115	3177913.2500					1.0000			100.0%
→ Sb 121	0.0000	0.0000				1.0000			
- Sb 123	0.0000	0.0000				1.0000			
> Pt 195	582535.8750					1.0000			100.0%
→ Tl 205	0.0000	0.0000				1.0000			
→ - Pb 208	0.0000	0.0000				1.0000			

0037

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

NIST 1640

2mL diluted to 10mL = 5x					Total Solids: 100.00%			10/10/01 9:22:57		
Analyte	Raw Conc. ug/L	Inst Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	33.0422	6.6084	33.0277			1.0000	0.0387	34.940	94.5%	
→ Al 27	52.0231	10.4046	51.9896			1.0000	0.0945	52.000	100.0%	
> Sc 45	1390721.6250					1.0000			100.7%	
→ Cr 52	37.3696	7.4739	37.3362			1.0000	0.0897	38.600	96.7%	
Cr 53	37.4570	7.4914	37.4070			1.0000	0.4593	38.600	96.9%	
→ Ni 60	26.6872	5.3374	26.6859			1.0000	0.0040	27.400	97.4%	
Ni 62	27.0501	5.4100	27.0525			1.0000	0.1291	27.400	98.7%	
→ Cu 65	85.4065	17.0813	85.4101			1.0000	0.0272	85.200	100.2%	
→ - Cu 63	85.2610	17.0522	85.2595			1.0000	0.0371	85.200	100.1%	
→ - Zn 66	54.2156	10.8431	54.1488			1.0000	0.2214	53.200	101.8%	
→ Zn-1 68	58.8605	11.7721	58.7987			1.0000	0.2425	53.200	110.5%	
→ Zn 68	54.1500	10.8300	54.0884			1.0000	0.2486	53.200	101.7%	
As-1 75	25.9278	5.1856	26.0936			1.0000	0.7012	26.670	97.8%	
→ As 75	28.5942	5.3189	26.4896			1.0000	0.2899	26.670	99.3%	
Se 77	21.7228	4.3446	21.8442			1.0000	0.6444	21.960	99.5%	
→ Se 82	21.9623	4.3925	21.8334			1.0000	0.8898	21.960	99.4%	
→ Ag 107	8.0237	1.6047	8.0156			1.0000	0.0191	7.620	105.2%	
Ag 109	8.0795	1.6159	8.0744			1.0000	0.0199	7.620	106.0%	
→ Cd 111	22.4694	4.4939	22.4786			1.0000	0.0298	22.790	98.6%	
→ Cd-1 114	22.5390	4.5078	22.5336			1.0000	0.0133	22.790	98.9%	
→ Cd 114	22.5900	4.5180	22.5907			1.0000	0.0167	22.790	99.1%	
> In 115	3179504.0000					1.0000			100.1%	
→ Sb 121	13.8338	2.7668	13.8335			1.0000	0.0059	13.790	100.3%	
- Sb 123	13.7958	2.7592	13.7966			1.0000	0.0072	13.790	100.0%	
> Pt 195	582655.6875					1.0000			100.0%	
→ Ti 205	0.0081	0.0016	0.0077			1.0000	0.0040			
→ - Pb 208	27.5354	5.5071	27.5364			1.0000	0.0126	27.890	98.7%	

CRM TMDW

2mL diluted to 10mL = 5x					Total Solids: 100.00%			10/10/01 9:28:02		
Analyte	Raw Conc. ug/L	Inst Conc. ug/L	IB Corr. Conc. ug/L	PB Corr. Conc. ug/L	Average	Eff. Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	18.5118	3.7024	18.4974			1.0000	0.0387	20.000	92.5%	
→ Al 27	125.5348	25.1070	125.5013			1.0000	0.0945	120.000	104.6%	
> Sc 45	1373403.1250					1.0000			99.5%	
→ Cr 52	20.8589	4.1718	20.8255			1.0000	0.0897	20.000	104.1%	
Cr 53	20.2346	4.0469	20.1847			1.0000	0.4593	20.000	100.9%	
→ Ni 60	59.6474	11.9295	59.6461			1.0000	0.0040	60.000	99.4%	
Ni 62	60.0567	12.0113	60.0591			1.0000	0.1291	60.000	100.1%	
→ Cu 65	20.4280	4.0856	20.4316			1.0000	0.0272	20.000	102.2%	
→ - Cu 63	20.3222	4.0644	20.3207			1.0000	0.0371	20.000	101.6%	
→ - Zn 66	73.5404	14.7081	73.4735			1.0000	0.2214	70.000	105.0%	
→ Zn-1 68	74.4322	14.8864	74.3705			1.0000	0.2425	70.000	105.2%	
→ Zn 68	73.9158	14.7832	73.8542			1.0000	0.2486	70.000	105.5%	
As-1 75	80.0318	16.0064	80.1977			1.0000	0.7012	80.000	100.2%	
→ As 75	78.3475	15.6695	78.2429			1.0000	0.2899	80.000	97.8%	
Se 77	10.1187	2.0237	10.2402			1.0000	0.6444	10.000	102.4%	
→ Se 82	10.5622	2.1124	10.4332			1.0000	0.8898	10.000	104.3%	
→ Ag 107	2.1782	0.4356	2.1702			1.0000	0.0191	2.000	108.5%	
Ag 109	2.2378	0.4475	2.2326			1.0000	0.0199	2.000	111.6%	
→ Cd 111	9.9857	1.9971	9.9950			1.0000	0.0298	10.000	99.9%	
→ Cd-1 114	10.2291	2.0458	10.2237			1.0000	0.0133	10.000	102.2%	
→ Cd 114	10.1624	2.0325	10.1631			1.0000	0.0167	10.000	101.6%	
> In 115	3202282.5000					1.0000			100.8%	
→ Sb 121	10.3937	2.0787	10.3934			1.0000	0.0059	10.000	103.9%	
- Sb 123	10.3616	2.0723	10.3623			1.0000	0.0072	10.000	103.6%	
> Pt 195	597618.6875					1.0000			102.6%	
→ Ti 205	10.2013	2.0403	10.2009			1.0000	0.0040	10.000	102.0%	
→ - Pb 208	39.2187	7.8437	39.2198			1.0000	0.0126	40.000	98.0%	

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCV1

No. Dilution					Total Solids: 100.00%			10/10/01	10:10:10	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	0.4931	0.4931				1.0000		0.500	98.6%	
→ Al 27	52.0391	52.0391				1.0000		50.000	104.1%	
> Sc 45	1340499.8750					1.0000			97.1%	
→ Cr 52	10.1700	10.1700				1.0000		10.000	101.7%	
Cr 53	10.0342	10.0342				1.0000		10.000	100.3%	
→ Ni 60	10.0649	10.0649				1.0000		10.000	100.6%	
Ni 62	10.2113	10.2113				1.0000		10.000	102.1%	
→ Cu 65	10.3025	10.3025				1.0000		10.000	103.0%	
- Cu 63	10.3072	10.3072				1.0000		10.000	103.1%	
→ - Zn 66	20.7455	20.7455				1.0000		20.000	103.7%	
Zn-1 68	20.9679	20.9679				1.0000		20.000	104.8%	
Zn 68	20.9807	20.9807				1.0000		20.000	104.9%	
As-1 75	10.4783	10.4783				1.0000		10.000	104.8%	
→ As 75	10.3394	10.3394				1.0000		10.000	103.4%	
Se 77	9.9743	9.9743				1.0000		10.000	99.7%	
→ Se 82	9.8766	9.8766				1.0000		10.000	98.8%	
→ Ag 107	1.0698	1.0698				1.0000		1.000	107.0%	
Ag 109	1.0696	1.0696				1.0000		1.000	107.0%	
Cd 111	1.0252	1.0252				1.0000		1.000	102.5%	
Cd-1 114	1.0187	1.0187				1.0000		1.000	101.9%	
→ Cd 114	1.0180	1.0180				1.0000		1.000	101.8%	
> In 115	3058924.0000					1.0000			96.3%	
→ Sb 121	0.5151	0.5151				1.0000		0.500	103.0%	
- Sb 123	0.5225	0.5225				1.0000		0.500	104.5%	
> Pt 195	575554.0000					1.0000			98.8%	
→ Tl 205	0.4938	0.4938				1.0000		0.500	98.8%	
→ - Pb 208	2.0513	2.0513				1.0000		2.000	102.6%	

CCB1

No. Dilution					Total Solids: 100.00%			10/10/01	10:15:14	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	0.0043	0.0043				1.0000				
→ Al 27	-0.0060	-0.0060				1.0000				
> Sc 45	1358188.2500					1.0000			98.3%	
→ Cr 52	0.0167	0.0167				1.0000				
Cr 53	-0.0679	-0.0679				1.0000				
→ Ni 60	0.0017	0.0017				1.0000				
Ni 62	0.0462	0.0462				1.0000				
→ Cu 65	0.0031	0.0031				1.0000				
- Cu 63	-0.0056	-0.0056				1.0000				
→ - Zn 66	-0.0042	-0.0042				1.0000				
Zn-1 68	-0.0017	-0.0017				1.0000				
Zn 68	-0.0022	-0.0022				1.0000				
As-1 75	0.0448	0.0448				1.0000				
→ As 75	0.0442	0.0442				1.0000				
Se 77	-0.0478	-0.0478				1.0000				
→ Se 82	0.0800	0.0800				1.0000				
→ Ag 107	0.0011	0.0011				1.0000				
Ag 109	0.0009	0.0009				1.0000				
Cd 111	-0.0010	-0.0010				1.0000				
Cd-1 114	0.0023	0.0023				1.0000				
→ Cd 114	0.0010	0.0010				1.0000				
> In 115	3045172.5000					1.0000			95.8%	
→ Sb 121	0.0001	0.0001				1.0000				
- Sb 123	-0.0009	-0.0009				1.0000				
> Pt 195	581443.6875					1.0000			99.8%	
→ Tl 205	0.0002	0.0002				1.0000				
→ - Pb 208	-0.0010	-0.0010				1.0000				

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCV2

No. Dilution		Total Solids: 100.00%				10/10/01 11:17:22				
Analyte	Raw Conc. ug/L	Inst Conc. ug/L	IB Corr Conc. ug/L	PB Corr Conc. ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	0.5141	0.5141				1.0000		0.500	102.8%	
→ Al 27	55.3822	55.3822				1.0000		50.000	110.8%	
> Sc 45	1302252.5000					1.0000			94.3%	
→ Cr 52	10.2716	10.2716				1.0000		10.000	102.7%	
Cr 53	9.4688	9.4688				1.0000		10.000	94.7%	
→ Ni 60	10.1606	10.1606				1.0000		10.000	101.6%	
Ni 62	9.9674	9.9674				1.0000		10.000	99.7%	
→ Cu 65	10.5829	10.5829				1.0000		10.000	105.8%	
- Cu 63	10.4799	10.4799				1.0000		10.000	104.8%	
→ - Zn 66	19.9623	19.9623				1.0000		20.000	99.8%	
Zn-1 68	20.0553	20.0553				1.0000		20.000	100.3%	
Zn 68	20.0596	20.0596				1.0000		20.000	100.3%	
As-1 75	9.9053	9.9053				1.0000		10.000	99.1%	
→ As 75	10.0810	10.0810				1.0000		10.000	100.8%	
Se 77	10.0377	10.0377				1.0000		10.000	100.4%	
→ Se 82	9.7061	9.7061				1.0000		10.000	97.1%	
→ Ag 107	1.0703	1.0703				1.0000		1.000	107.0%	
Ag 109	1.0777	1.0777				1.0000		1.000	107.8%	
Cd 111	0.9834	0.9834				1.0000		1.000	98.3%	
Cd-1 114	1.0170	1.0170				1.0000		1.000	101.7%	
→ Cd 114	1.0116	1.0116				1.0000		1.000	101.2%	
> In 115	3184575.2500					1.0000			100.2%	
→ Sb 121	0.5141	0.5141				1.0000		0.500	102.8%	
- Sb 123	0.5132	0.5132				1.0000		0.500	102.6%	
> Pt 195	592541.0000					1.0000			101.7%	
→ Tl 205	0.5065	0.5065				1.0000		0.500	101.3%	
→ - Pb 208	2.0659	2.0659				1.0000		2.000	103.3%	

CCB2

No Dilution		Total Solids: 100.00%				10/10/01 11:22:26				
Analyte	Raw Conc. ug/L	Inst Conc. ug/L	IB Corr Conc. ug/L	PB Corr Conc. ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be 9	0.0074	0.0074				1.0000				
→ Al 27	0.5320	0.5320				1.0000				
> Sc 45	1272273.1250					1.0000			92.1%	
→ Cr 52	0.0666	0.0666				1.0000				
Cr 53	-0.6195	-0.6195				1.0000				
→ Ni 60	0.0056	0.0056				1.0000				
Ni 62	-0.1714	-0.1714				1.0000				
→ Cu 65	0.0030	0.0030				1.0000				
- Cu 63	-0.0036	-0.0036				1.0000				
→ - Zn 66	-0.0111	-0.0111				1.0000				
Zn-1 68	-0.0290	-0.0290				1.0000				
Zn 68	-0.0296	-0.0296				1.0000				
As-1 75	-0.1023	-0.1023				1.0000				
→ As 75	0.0214	0.0214				1.0000				
Se 77	-0.0105	-0.0105				1.0000				
→ Se 82	0.0165	0.0165				1.0000				
→ Ag 107	0.0029	0.0029				1.0000				
Ag 109	0.0025	0.0025				1.0000				
Cd 111	-0.0042	-0.0042				1.0000				
Cd-1 114	0.0012	0.0012				1.0000				
→ Cd 114	-0.0006	-0.0006				1.0000				
> In 115	3053615.2500					1.0000			96.1%	
→ Sb 121	0.0000	0.0000				1.0000				
- Sb 123	-0.0007	-0.0007				1.0000				
> Pt 195	585540.6250					1.0000			100.5%	
→ Tl 205	0.0002	0.0002				1.0000				
→ - Pb 208	0.0016	0.0016				1.0000				

0040

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCV3

No. Dilution		Total Solids: 100.00%				10/10/01 12:28:30		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be 9	0.4212	0.4212				1.0000		0.500 84.2%
→ Al 27	51.3495	51.3495				1.0000		50.000 102.7%
> Sc 45	1381216.2500					1.0000		100.0%
→ Cr 52	10.2517	10.2517				1.0000		10.000 102.5%
Cr 53	9.3574	9.3574				1.0000		10.000 93.6%
→ Ni 60	10.1629	10.1629				1.0000		10.000 101.6%
Ni 62	10.0634	10.0634				1.0000		10.000 100.6%
→ Cu 65	10.5648	10.5648				1.0000		10.000 105.6%
- Cu 63	10.3846	10.3846				1.0000		10.000 103.8%
→ - Zn 66	19.5268	19.5268				1.0000		20.000 97.6%
Zn-1 68	19.9800	19.9800				1.0000		20.000 99.9%
Zn 68	19.9858	19.9858				1.0000		20.000 99.9%
As-1 75	9.7648	9.7648				1.0000		10.000 97.6%
→ As 75	10.0540	10.0540				1.0000		10.000 100.5%
Se 77	9.9238	9.9238				1.0000		10.000 99.2%
→ Se 82	10.2236	10.2236				1.0000		10.000 102.2%
→ Ag 107	1.0367	1.0367				1.0000		1.000 103.7%
Ag 109	1.0453	1.0453				1.0000		1.000 104.5%
Cd 111	0.9801	0.9801				1.0000		1.000 98.0%
Cd-1 114	0.9928	0.9928				1.0000		1.000 99.3%
→ Cd 114	0.9896	0.9896				1.0000		1.000 99.0%
> In 115	3430420.0000					1.0000		107.9%
→ Sb 121	0.5062	0.5062				1.0000		0.500 101.2%
- Sb 123	0.4962	0.4962				1.0000		0.500 99.2%
> Pt 195	631555.6250					1.0000		108.4%
→ Tl 205	0.4893	0.4893				1.0000		0.500 97.9%
→ - Pb 208	2.0236	2.0236				1.0000		2.000 101.2%

CCB3

No. Dilution		Total Solids: 100.00%				10/10/01 12:35:57		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V. %Rec RPD/RSD
→ - Be 9	0.0026	0.0026				1.0000		
→ Al 27	0.1009	0.1009				1.0000		
> Sc 45	1341981.7500					1.0000		97.2%
→ Cr 52	0.0471	0.0471				1.0000		
Cr 53	-0.6394	-0.6394				1.0000		
→ Ni 60	0.0043	0.0043				1.0000		
Ni 62	0.0301	0.0301				1.0000		
→ Cu 65	0.0035	0.0035				1.0000		
- Cu 63	-0.0033	-0.0033				1.0000		
→ - Zn 66	-0.0165	-0.0165				1.0000		
Zn-1 68	-0.0559	-0.0559				1.0000		
Zn 68	-0.0561	-0.0561				1.0000		
As-1 75	-0.2874	-0.2874				1.0000		
→ As 75	-0.0001	-0.0001				1.0000		
Se 77	0.0431	0.0431				1.0000		
→ Se 82	0.0974	0.0974				1.0000		
→ Ag 107	0.0003	0.0003				1.0000		
Ag 109	0.0001	0.0001				1.0000		
Cd 111	-0.0013	-0.0013				1.0000		
Cd-1 114	-0.0040	-0.0040				1.0000		
→ Cd 114	-0.0040	-0.0040				1.0000		
> In 115	3397645.0000					1.0000		106.9%
→ Sb 121	-0.0005	-0.0005				1.0000		
- Sb 123	-0.0006	-0.0006				1.0000		
> Pt 195	619004.1875					1.0000		106.3%
→ Tl 205	-0.0002	-0.0002				1.0000		
→ - Pb 208	-0.0001	-0.0001				1.0000		

BLK

No. Dilution		Total Solids: 100.00%				10/10/01 12:41:02		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V. %Rec RPD/RSD
> Sc 45	1370078.1250					1.0000		99.2%
→ Cu 65	-0.0228	-0.0228	-0.0239	-0.0018		1.0000	0.0056	
- Cu 63	-0.0321	-0.0321	-0.0248	-0.0044		1.0000	0.0070	
→ - Zn 66	-0.0648	-0.0648	-0.0677	-0.0336		1.0000	0.0110	
Zn-1 68	-0.0896	-0.0896	-0.0786	-0.0459		1.0000	0.0343	
Zn 68	-0.0888	-0.0888	-0.0773	-0.0468		1.0000	0.0356	
> In 115	3458071.5000					1.0000		108.8%
> Pt 195	638853.0000					1.0000		109.7%
→ - Pb 208	-0.0150	-0.0150	-0.0148	0.0114		1.0000	0.0017	

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCV4

No. Dilution						Total Solids:	100.00%	10/10/01	13:36:35		
Analyte		Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be	9	0.3819	0.3819				1.0000		0.500	76.4%	
→ Al	27	50.9494	50.9494				1.0000		50.000	101.9%	
> Sc	45	1370415.2500					1.0000			99.2%	
→ Cr	52	10.4572	10.4572				1.0000		10.000	104.6%	
→ Cr	53	9.6119	9.6119				1.0000		10.000	96.1%	
→ Ni	60	10.3640	10.3640				1.0000		10.000	103.6%	
→ Ni	62	10.3085	10.3085				1.0000		10.000	103.1%	
→ Cu	65	10.6216	10.6216				1.0000		10.000	106.2%	
→ - Cu	63	10.6215	10.6215				1.0000		10.000	106.2%	
→ - Zn	66	19.9792	19.9792				1.0000		20.000	99.9%	
→ Zn-1	68	20.1232	20.1232				1.0000		20.000	100.6%	
→ Zn	68	20.1247	20.1247				1.0000		20.000	100.6%	
→ As-1	75	9.9236	9.9236				1.0000		10.000	99.2%	
→ As	75	10.0525	10.0525				1.0000		10.000	100.5%	
→ Se	77	10.2215	10.2215				1.0000		10.000	102.2%	
→ Se	82	9.9425	9.9425				1.0000		10.000	99.4%	
→ Ag	107	1.0642	1.0642				1.0000		1.000	106.4%	
→ Ag	109	1.0815	1.0815				1.0000		1.000	108.2%	
→ Cd	111	1.0346	1.0346				1.0000		1.000	103.5%	
→ Cd-1	114	1.0132	1.0132				1.0000		1.000	101.3%	
→ Cd	114	1.0156	1.0156				1.0000		1.000	101.6%	
> In	115	3407154.5000					1.0000			107.2%	
→ Sb	121	0.5125	0.5125				1.0000		0.500	102.5%	
→ - Sb	123	0.5100	0.5100				1.0000		0.500	102.0%	
> Pt	195	630783.3750					1.0000			108.3%	
→ Tl	205	0.5015	0.5015				1.0000		0.500	100.3%	
→ - Pb	208	2.0238	2.0238				1.0000		2.000	101.2%	

CCB4

No. Dilution						Total Solids:	100.00%	10/10/01	13:41:39		
Analyte		Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be	9	0.0068	0.0068				1.0000				
→ Al	27	0.0365	0.0365				1.0000				
> Sc	45	1354733.6250					1.0000			98.1%	
→ Cr	52	0.0549	0.0549				1.0000				
→ Cr	53	-0.5396	-0.5396				1.0000				
→ Ni	60	0.0044	0.0044				1.0000				
→ Ni	62	-0.0527	-0.0527				1.0000				
→ Cu	65	0.0052	0.0052				1.0000				
→ - Cu	63	-0.0081	-0.0081				1.0000				
→ - Zn	66	-0.0264	-0.0264				1.0000				
→ Zn-1	68	-0.0356	-0.0356				1.0000				
→ Zn	68	-0.0357	-0.0357				1.0000				
→ As-1	75	-0.1907	-0.1907				1.0000				
→ As	75	-0.0110	-0.0110				1.0000				
→ Se	77	0.0074	0.0074				1.0000				
→ Se	82	-0.0320	-0.0320				1.0000				
→ Ag	107	0.0006	0.0006				1.0000				
→ Ag	109	-0.0001	-0.0001				1.0000				
→ Cd	111	-0.0008	-0.0008				1.0000				
→ Cd-1	114	-0.0034	-0.0034				1.0000				
→ Cd	114	-0.0038	-0.0038				1.0000				
> In	115	3435044.7500					1.0000			108.1%	
→ Sb	121	-0.0005	-0.0005				1.0000				
→ - Sb	123	-0.0004	-0.0004				1.0000				
> Pt	195	636435.8750					1.0000			109.3%	
→ Tl	205	0.0000	0.0000				1.0000				
→ - Pb	208	0.0010	0.0010				1.0000				

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

47th-T 2X -MSD

5mL diluted to: 10mL = 2x						Total Solids:	100.00%	10/10/01	14:14:30		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD	
> Sc 45	1401369.1250					1.0000			101.5%		
→ Cr 52	53.8361	26.9180	53.7151	53.7253		1.0000	0.0539	40.000	101.6%	0.8%	
Cr 53	52.7892	26.3946	53.8966	53.9325		1.0000	0.2374	40.000	99.2%	0.3%	
→ Ni 60	64.4993	32.2496	64.4924	64.4936		1.0000	0.0059	50.000	99.1%	2.7%	
Ni 62	66.0832	33.0416	66.0656	66.0865		1.0000	0.5151	50.000	99.7%	1.9%	
Cu 65	63.9180	31.9590	63.9163	63.9358		1.0000	0.0261	50.000	101.4%	2.6%	
→ - Cu 63	63.0135	31.5068	63.0292	63.0491		1.0000	0.0233	50.000	99.5%	3.5%	
→ - Zn 66	147.3178	73.6589	147.3733	147.3951		1.0000	0.0491	100.000	96.8%	2.2%	
Zn-1 68	155.4114	77.7057	155.5102	155.5319		1.0000	0.0322	100.000	98.0%	2.3%	
Zn 68	147.2310	73.6155	147.3301	147.3500		1.0000	0.0341	100.000	96.9%	2.5%	
As-1 75	43.1147	21.5574	43.5969	43.6334		1.0000	0.4368	40.000	98.5%	1.0%	
→ As 75	44.1712	22.0856	44.1814	44.1873		1.0000	0.0576	40.000	99.0%	0.0%	
→ Aq 107	8.1325	4.0662	8.1339	8.1341		1.0000	0.0024	8.000	100.7%	0.2%	
Aq 109	8.1656	4.0828	8.1677	8.1681		1.0000	0.0004	8.000	101.4%	0.2%	
Cd 111	4.4173	2.2087	4.4166	4.4177		1.0000	0.0068	4.000	99.9%	0.2%	
Cd-1 114	4.2729	2.1365	4.2856	4.2852		1.0000	0.0085	4.000	99.7%	1.3%	
→ Cd 114	4.3823	2.1911	4.3940	4.3945		1.0000	0.0129	4.000	100.3%	1.4%	
> In 115	3497397.0000					1.0000			110.1%		
> Pt 195	644691.8125					1.0000			110.7%		
→ - Pb 208	22.7739	11.3869	22.7753	22.8013		1.0000	0.0028	10.000	103.9%	0.8%	

47th-D 2X

5mL diluted to: 10mL = 2x						Total Solids:	100.00%	10/10/01	14:23:33		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD	
> Sc 45	1417127.6250					1.0000			102.6%		
→ Cr 52	0.2577	0.1289	0.1368	0.1470		1.0000	0.0539				
Cr 53	0.2823	0.1412	1.3896	1.4256		1.0000	0.2374				
→ Ni 60	2.0924	1.0462	2.0855	2.0867		1.0000	0.0059				
Ni 62	2.2652	1.1326	2.2475	2.2684		1.0000	0.5151				
Cu 65	2.6062	1.3031	2.6045	2.6239		1.0000	0.0261				
→ - Cu 63	2.5787	1.2893	2.5944	2.6143		1.0000	0.0233				
→ - Zn 66	1.0824	0.5412	1.1379	1.1597		1.0000	0.0491				
Zn-1 68	3.3057	1.6529	3.4045	3.4262		1.0000	0.0322				
Zn 68	0.6710	0.3355	0.7702	0.7900		1.0000	0.0341				
As-1 75	2.0132	1.0066	2.4954	2.5319		1.0000	0.4368				
→ As 75	2.9814	1.4907	2.9917	2.9976		1.0000	0.0576				
→ Aq 107	0.0045	0.0022	0.0059	0.0061		1.0000	0.0024				
Aq 109	0.0025	0.0013	0.0046	0.0050		1.0000	0.0004				
Cd 111	-0.0142	-0.0071	-0.0149	-0.0139		1.0000	0.0068				
Cd-1 114	0.0043	0.0022	0.0170	0.0167		1.0000	0.0085				
→ Cd 114	-0.0171	-0.0086	-0.0054	-0.0049		1.0000	0.0129				
> In 115	3641686.0000					1.0000			114.6%		
> Pt 195	665443.3125					1.0000			114.2%		
→ - Pb 208	0.0892	0.0446	0.0907	0.1167		1.0000	0.0028				

CCV5

No Dilution						Total Solids:	100.00%	10/10/01	14:28:08		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD	
> Sc 45	1436043.7500					1.0000			104.0%		
→ Cr 52	10.2577	10.2577				1.0000		10.000	102.6%		
Cr 53	9.0671	9.0671				1.0000		10.000	90.7%		
→ Ni 60	10.2314	10.2314				1.0000		10.000	102.3%		
Ni 62	10.1118	10.1118				1.0000		10.000	101.1%		
Cu 65	10.3345	10.3345				1.0000		10.000	103.3%		
→ - Cu 63	10.3140	10.3140				1.0000		10.000	103.1%		
→ - Zn 66	18.9703	18.9703				1.0000		20.000	94.9%		
Zn-1 68	19.2044	19.2044				1.0000		20.000	96.0%		
Zn 68	19.2054	19.2054				1.0000		20.000	96.0%		
As-1 75	9.1610	9.1610				1.0000		10.000	91.6%		
→ As 75	9.5800	9.5800				1.0000		10.000	95.8%		
→ Aq 107	1.0152	1.0152				1.0000		1.000	101.5%		
Aq 109	1.0255	1.0255				1.0000		1.000	102.6%		
Cd 111	0.9760	0.9760				1.0000		1.000	97.6%		
Cd-1 114	0.9794	0.9794				1.0000		1.000	97.9%		
→ Cd 114	0.9812	0.9812				1.0000		1.000	98.1%		
> In 115	3663501.7500					1.0000			115.3%		
> Pt 195	666660.8125					1.0000			114.4%		
→ - Pb 208	2.0002	2.0002				1.0000		2.000	100.0%		

0043

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCB5

No. Dilution						Total Solids:	100.00%	10/10/01	14:32:44
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1434251.2500					1.0000			103.9%
→ Cr 52		0.0128				1.0000			
Cr 53	-0.9243	-0.9243				1.0000			
→ Ni 60	0.0027	0.0027				1.0000			
Ni 62	-0.2332	-0.2332				1.0000			
Cu 65	0.0053	0.0053				1.0000			
→ - Cu 63	-0.0060	-0.0060				1.0000			
→ - Zn 66	-0.0421	-0.0421				1.0000			
Zn-1 68	-0.0632	-0.0632				1.0000			
Zn 68	-0.0638	-0.0638				1.0000			
As-1 75	-0.2564	-0.2564				1.0000			
→ As 75	0.0033	0.0033				1.0000			
→ Ag 107	0.0028	0.0028				1.0000			
Ag 109	0.0019	0.0019				1.0000			
Cd 111	-0.0036	-0.0036				1.0000			
Cd-1 114	-0.0037	-0.0037				1.0000			
→ Cd 114	-0.0055	-0.0055				1.0000			
> In 115	3546130.0000					1.0000			111.6%
> Pt 195	648781.1250					1.0000			111.4%
→ - Pb 208	0.0007	0.0007				1.0000			

47th-T+0.2X

5mL diluted to 10mL = 2x						Total Solids:	100.00%	10/10/01	14:37:18
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1441868.5000					1.0000			104.4%
→ Cr 52	13.4087	6.7044	13.2877	13.2980		1.0000	0.0539		
Cr 53	12.7361	6.3681	13.8434	13.8794		1.0000	0.2374		
→ Ni 60	15.1781	7.5891	15.1712	15.1724		1.0000	0.0059		
Ni 62	16.3813	8.1906	16.3637	16.3846		1.0000	0.5151		
Cu 65	13.5923	6.7962	13.5906	13.6100		1.0000	0.0261		
- Cu 63	13.5086	6.7543	13.5243	13.5442		1.0000	0.0233		
→ - Zn 66	51.1902	25.5951	51.2457	51.2675		1.0000	0.0491		
Zn-1 68	58.7473	29.3736	58.8460	58.8678		1.0000	0.0322		
Zn 68	51.6656	25.8328	51.7648	51.7846		1.0000	0.0341		
As-1 75	3.5605	1.7802	4.0427	4.0792		1.0000	0.4368		
→ As 75	4.6247	2.3124	4.6350	4.6409		1.0000	0.0576		
→ Ag 107	0.0755	0.0377	0.0769	0.0771		1.0000	0.0024		
Ag 109	0.0601	0.0300	0.0622	0.0625		1.0000	0.0004		
Cd 111	0.4343	0.2172	0.4336	0.4347		1.0000	0.0068		
Cd-1 114	0.2828	0.1414	0.2955	0.2951		1.0000	0.0085		
→ Cd 114	0.3655	0.1828	0.3773	0.3777		1.0000	0.0129		
> In 115	3640956.2500					1.0000			114.6%
> Pt 195	663394.0000					1.0000			113.9%
→ - Pb 208	12.7430	6.3715	12.7444	12.7704		1.0000	0.0028		

47th-T+10.2X

5mL diluted to 10mL = 2x						Total Solids:	100.00%	10/10/01	14:38:03
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1456894.2500					1.0000			105.5%
→ Cr 52	34.1729	17.0864	34.0519	34.0621		1.0000	0.0539		
Cr 53	32.9904	16.4952	34.0977	34.1336		1.0000	0.2374		
→ Ni 60	40.6647	20.3323	40.6578	40.6589		1.0000	0.0059		
Ni 62	42.0883	21.0441	42.0707	42.0916		1.0000	0.5151		
Cu 65	40.0582	20.0291	40.0565	40.0760		1.0000	0.0261		
- Cu 63	39.4478	19.7239	39.4636	39.4835		1.0000	0.0233		
→ - Zn 66	101.0980	50.5490	101.1535	101.1753		1.0000	0.0491		
Zn-1 68	109.8981	54.9490	109.9968	110.0186		1.0000	0.0322		
Zn 68	102.2929	51.1464	102.3920	102.4119		1.0000	0.0341		
As-1 75	23.4286	11.7143	23.9107	23.9473		1.0000	0.4368		
→ As 75	24.4938	12.2469	24.5040	24.5099		1.0000	0.0576		
→ Ag 107	4.1560	2.0780	4.1574	4.1576		1.0000	0.0024		
Ag 109	4.1485	2.0742	4.1506	4.1510		1.0000	0.0004		
Cd 111	2.4214	1.2107	2.4207	2.4217		1.0000	0.0068		
Cd-1 114	2.3181	1.1591	2.3308	2.3304		1.0000	0.0085		
→ Cd 114	2.4212	1.2106	2.4330	2.4334		1.0000	0.0129		
> In 115	3664530.0000					1.0000			115.3%
> Pt 195	668379.5000					1.0000			114.7%
→ - Pb 208	17.9637	8.9818	17.9651	17.9911		1.0000	0.0028		

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

PLANT#1-T 2X

5mL diluted to 10mL = 2x

Total Solids: 100.00% 10/10/01 15:18:28

Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1450151.8750					1.0000			105.0%	
→ Cr 52	49.9577	24.9788	49.8367	49.8469		1.0000	0.0539			
Cr 53	53.1081	26.5540	54.2154	54.2513		1.0000	0.2374			
→ Ni 60	8.1193	4.0597	8.1124	8.1136		1.0000	0.0059			
Ni 62	30.8321	15.4161	30.8145	30.8354		1.0000	0.5151			
Cu 65	27.9080	13.9540	27.9063	27.9258		1.0000	0.0261			
→ - Cu 63	28.1457	14.0728	28.1614	28.1813		1.0000	0.0233			
→ - Zn 66	154.6391	77.3195	154.6946	154.7165		1.0000	0.0491			
Zn-1 68	157.3960	78.6980	157.4948	157.5165		1.0000	0.0322			
Zn 68	157.6039	78.8020	157.7030	157.7229		1.0000	0.0341			
As-1 75	1.0951	0.5476	1.5773	1.6138		1.0000	0.4368			
→ As 75	1.7224	0.8612	1.7327	1.7386		1.0000	0.0576			
→ Ag 107	0.3786	0.1893	0.3800	0.3802		1.0000	0.0024			
Ag 109	0.4512	0.2256	0.4533	0.4536		1.0000	0.0004			
Cd 111	4.5275	2.2638	4.5268	4.5278		1.0000	0.0068			
Cd-1 114	4.9372	2.4686	4.9499	4.9495		1.0000	0.0085			
→ Cd 114	4.6897	2.3448	4.7014	4.7019		1.0000	0.0129			
> In 115	3762583.0000					1.0000			118.4%	
> Pt 195	680966.6875					1.0000			116.9%	
→ - Pb 208	15.4774	7.7387	15.4789	15.5049		1.0000	0.0028			

PLANT#1-D 2X

5mL diluted to 10mL = 2x

Total Solids: 100.00% 10/10/01 15:23:06

Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1489511.3750					1.0000			107.9%	
→ Cr 52	9.1585	4.5792	9.0375	9.0477		1.0000	0.0539			
Cr 53	12.7772	6.3886	13.8845	13.9204		1.0000	0.2374			
→ Ni 60	3.5331	1.7665	3.5261	3.5273		1.0000	0.0059			
Ni 62	23.4629	11.7315	23.4453	23.4662		1.0000	0.5151			
Cu 65	3.6555	1.8277	3.6537	3.6732		1.0000	0.0261			
→ - Cu 63	4.2867	2.1434	4.3024	4.3223		1.0000	0.0233			
→ - Zn 66	4.7148	2.3574	4.7703	4.7922		1.0000	0.0491			
Zn-1 68	4.9641	2.4820	5.0628	5.0846		1.0000	0.0322			
Zn 68	4.0994	2.0497	4.1985	4.2184		1.0000	0.0341			
As-1 75	0.7414	0.3707	1.2235	1.2601		1.0000	0.4368			
→ As 75	1.2172	0.6086	1.2275	1.2334		1.0000	0.0576			
→ Ag 107	0.3610	0.1805	0.3624	0.3626		1.0000	0.0024			
Ag 109	0.3616	0.1808	0.3637	0.3641		1.0000	0.0004			
Cd 111	0.0440	0.0220	0.0433	0.0444		1.0000	0.0068			
Cd-1 114	0.4773	0.2387	0.4900	0.4896		1.0000	0.0085			
→ Cd 114	0.1745	0.0872	0.1862	0.1867		1.0000	0.0129			
> In 115	3810504.0000					1.0000			119.9%	
> Pt 195	685190.5000					1.0000			117.6%	
→ - Pb 208	0.3842	0.1921	0.3856	0.4116		1.0000	0.0028			

CCV6

No Dilution

Total Solids: 100.00% 10/10/01 15:27:43

Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1474174.1250					1.0000			106.7%	
→ Cr 52	10.2196	10.2196				1.0000		10.000	102.2%	
Cr 53	9.4774	9.4774				1.0000		10.000	94.8%	
→ Ni 60	10.2932	10.2932				1.0000		10.000	102.9%	
Ni 62	10.2405	10.2405				1.0000		10.000	102.4%	
Cu 65	10.3968	10.3968				1.0000		10.000	104.0%	
→ - Cu 63	10.3167	10.3167				1.0000		10.000	103.2%	
→ - Zn 66	18.9762	18.9762				1.0000		20.000	94.9%	
Zn-1 68	19.0563	19.0563				1.0000		20.000	95.3%	
Zn 68	19.0548	19.0548				1.0000		20.000	95.3%	
As-1 75	9.2381	9.2381				1.0000		10.000	92.4%	
→ As 75	9.4844	9.4844				1.0000		10.000	94.8%	
→ Ag 107	1.0261	1.0261				1.0000		1.000	102.6%	
Ag 109	1.0346	1.0346				1.0000		1.000	103.5%	
Cd 111	0.9736	0.9736				1.0000		1.000	97.4%	
Cd-1 114	0.9598	0.9598				1.0000		1.000	96.0%	
→ Cd 114	0.9565	0.9565				1.0000		1.000	95.6%	
> In 115	3745689.0000					1.0000			117.9%	
> Pt 195	667236.6250					1.0000			114.5%	
→ - Pb 208	2.0126	2.0126				1.0000		2.000	100.6%	

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

CCB6

No Dilution						Total Solids	100.00%	10/10/01	15:32:19	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1412724.3750					1.0000			102.3%	
→ Cr 52	0.1275	0.1275				1.0000				
Cr 53	-0.5374	-0.5374				1.0000				
→ Ni 60	0.0035	0.0035				1.0000				
Ni 62	-0.0238	-0.0238				1.0000				
Cu 65	0.0116	0.0116				1.0000				
→ - Cu 63	-0.0024	-0.0024				1.0000				
→ - Zn 66	-0.0235	-0.0235				1.0000				
Zn-1 68	-0.0607	-0.0607				1.0000				
Zn 68	-0.0609	-0.0609				1.0000				
As-1 75	-0.2345	-0.2345				1.0000				
→ As 75	-0.0288	-0.0288				1.0000				
→ Ag 107	0.0021	0.0021				1.0000				
Ag 109	0.0015	0.0015				1.0000				
Cd 111	-0.0036	-0.0036				1.0000				
Cd-1 114	-0.0054	-0.0054				1.0000				
→ Cd 114	-0.0079	-0.0079				1.0000				
> In 115	3580005.7500					1.0000			112.7%	
> Pt 195	649372.1250					1.0000			111.5%	
→ - Pb 208	-0.0002	-0.0002				1.0000				

RP-4 INFLUENT 2X

5mL diluted to 10mL = 2x						Total Solids	100.00%	10/10/01	15:38:33	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1455694.6250					1.0000			105.4%	
As-1 75	1.4910	0.7455	1.9731	2.0097		1.0000	0.4368			
→ As 75	2.3663	1.1831	2.3766	2.3825		1.0000	0.0576			
→ Ag 107	0.2046	0.1023	0.2060	0.2062		1.0000	0.0024			
Ag 109	0.1962	0.0981	0.1983	0.1987		1.0000	0.0004			
> In 115	3738310.5000					1.0000			117.6%	
> Pt 195	669260.0000					1.0000			114.9%	
→ - Pb 208	1.5155	0.7578	1.5169	1.5429		1.0000	0.0028			

RP-1-4 002 EFFLUENT 2X

5mL diluted to 10mL = 2x						Total Solids	100.00%	10/10/01	15:41:33	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1443417.5000					1.0000			104.5%	
As-1 75	0.2612	0.1306	0.7434	0.7799		1.0000	0.4368			
→ As 75	1.3742	0.6871	1.3844	1.3903		1.0000	0.0576			
→ Ag 107	0.0666	0.0333	0.0681	0.0682		1.0000	0.0024			
Ag 109	0.0667	0.0333	0.0688	0.0692		1.0000	0.0004			
> In 115	3741121.2500					1.0000			117.7%	
> Pt 195	661479.1250					1.0000			113.6%	
→ - Pb 208	0.1905	0.0953	0.1919	0.2179		1.0000	0.0028			

CCWRF INFLUENT 2X

5mL diluted to 10mL = 2x						Total Solids	100.00%	10/10/01	15:46:11	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1443540.1250					1.0000			104.5%	
As-1 75	1.5693	0.7847	2.0515	2.0880		1.0000	0.4368			
→ As 75	2.6716	1.3358	2.6819	2.6878		1.0000	0.0576			
→ Ag 107	4.2976	2.1488	4.2991	4.2992		1.0000	0.0024			
Ag 109	4.3455	2.1727	4.3476	4.3480		1.0000	0.0004			
> In 115	3740413.0000					1.0000			117.7%	
> Pt 195	688814.8125					1.0000			118.2%	
→ - Pb 208	1.0697	0.5349	1.0711	1.0971		1.0000	0.0028			

RP-1 001 EFFLUENT 2X

5mL diluted to 10mL = 2x						Total Solids	100.00%	10/10/01	15:50:50	
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
> Sc 45	1423814.7500					1.0000			103.1%	
As-1 75	0.2523	0.1262	0.7345	0.7710		1.0000	0.4368			
→ As 75	1.2349	0.6174	1.2452	1.2511		1.0000	0.0576			
→ Ag 107	0.0739	0.0370	0.0754	0.0755		1.0000	0.0024			
Ag 109	0.0691	0.0345	0.0712	0.0716		1.0000	0.0004			
> In 115	3639534.7500					1.0000			114.5%	
> Pt 195	650801.3750					1.0000			111.7%	
→ - Pb 208	0.3239	0.1619	0.3253	0.3513		1.0000	0.0028			

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

RP-1 INFLUENT 2X

5mL diluted to: 10mL = 2x						Total Solids: 100.00%	10/10/01 15:55:26		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1433839.2500					1.0000			103.8%
→ As-1 75	0.8941	0.4471	1.3763	1.4128		1.0000	0.4368		
→ As 75	1.8009	0.9004	1.8111	1.8170		1.0000	0.0576		
→ Aq 107	0.8161	0.4081	0.8175	0.8177		1.0000	0.0024		
Aq 109	0.8154	0.4077	0.8175	0.8179		1.0000	0.0004		
> In 115	3703726.0000					1.0000			116.5%
> Pt 195	675917.8750					1.0000			116.0%
→ - Pb 208	1.1846	0.5923	1.1860	1.2120		1.0000	0.0028		

CCWRF EFFLUENT 2X

5mL diluted to: 10mL = 2x						Total Solids: 100.00%	10/10/01 15:55:26		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1438928.2500					1.0000			104.2%
→ As-1 75	0.8940	0.4470	1.3762	1.4127		1.0000	0.4368		
→ As 75	1.9371	0.9685	1.9474	1.9533		1.0000	0.0576		
→ Aq 107	0.0600	0.0300	0.0615	0.0616		1.0000	0.0024		
Aq 109	0.0600	0.0300	0.0621	0.0625		1.0000	0.0004		
> In 115	3680832.0000					1.0000			115.8%
> Pt 195	656052.0000					1.0000			112.6%
→ - Pb 208	0.1466	0.0733	0.1481	0.1741		1.0000	0.0028		

CCV7

No Dilution						Total Solids: 100.00%	10/10/01 16:04:33		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1402403.1250					1.0000			101.6%
→ Cr 52	10.2306	10.2306				1.0000		10.000	102.3%
→ Cr 53	9.5565	9.5565				1.0000		10.000	95.6%
→ Ni 60	10.1822	10.1822				1.0000		10.000	101.3%
Ni 62	10.1464	10.1464				1.0000		10.000	101.5%
Cu 65	10.3960	10.3960				1.0000		10.000	104.0%
→ - Cu 63	10.3302	10.3302				1.0000		10.000	103.3%
→ - Zn 66	18.7584	18.7584				1.0000		20.000	93.8%
Zn-1 68	18.9584	18.9584				1.0000		20.000	94.8%
Zn 68	18.9510	18.9510				1.0000		20.000	94.8%
As-1 75	9.0098	9.0098				1.0000		10.000	90.1%
→ As 75	9.4442	9.4442				1.0000		10.000	94.4%
→ Aq 107	1.0133	1.0133				1.0000		1.000	101.3%
Aq 109	1.0321	1.0321				1.0000		1.000	103.2%
Cd 111	0.9865	0.9865				1.0000		1.000	98.7%
Cd-1 114	0.9800	0.9800				1.0000		1.000	98.0%
→ Cd 114	0.9871	0.9871				1.0000		1.000	98.7%
> In 115	3593025.2500					1.0000			113.1%
> Pt 195	659924.5000					1.0000			113.3%
→ - Pb 208	2.0347	2.0347				1.0000		2.000	101.7%

CCB7

No Dilution						Total Solids: 100.00%	10/10/01 16:09:08		
Analyte	Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec RPD/RSD
> Sc 45	1374767.2500					1.0000			99.5%
→ Cr 52	0.0960	0.0960				1.0000			
→ Cr 53	-0.4656	-0.4656				1.0000			
→ Ni 60	0.0049	0.0049				1.0000			
Ni 62	0.0986	0.0986				1.0000			
Cu 65	0.0060	0.0060				1.0000			
→ - Cu 63	-0.0058	-0.0058				1.0000			
→ - Zn 66	-0.0309	-0.0309				1.0000			
Zn-1 68	-0.0485	-0.0485				1.0000			
Zn 68	-0.0485	-0.0485				1.0000			
As-1 75	-0.3251	-0.3251				1.0000			
→ As 75	-0.0033	-0.0033				1.0000			
→ Aq 107	0.0022	0.0022				1.0000			
Aq 109	0.0016	0.0016				1.0000			
Cd 111	0.0012	0.0012				1.0000			
Cd-1 114	-0.0082	-0.0082				1.0000			
→ Cd 114	-0.0074	-0.0074				1.0000			
> In 115	3498223.5000					1.0000			110.1%
> Pt 195	640625.0000					1.0000			110.0%
→ - Pb 208	-0.0001	-0.0001				1.0000			

ICP Analysis Dataset Summary

Dataset: ICP1-011010-1

Batch 6 - Inst Blank Set

Analyte	IB1 ug/L	IB2 ug/L	IB3 ug/L	IB4 ug/L	n	Average	St Dev	EMDL	Eff Factor
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Batch 6 - Prep Blank Set

Analyte	PB1 ug/L	PB2 ug/L	PB3 ug/L	PB4 ug/L	n	Average	St Dev	EMDL	Eff Factor
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CCV13

No. Dilution		Total Solids: 100.00%				10/10/01 20:06:11					
Analyte		Raw Conc ug/L	Inst Conc ug/L	IB Corr Conc ug/L	PB Corr Conc ug/L	Average	Eff Factor	EMDL	T.V.	%Rec	RPD/RSD
→ - Be	9	0.4558	0.4558				1.0000		0.500	91.2%	
→ Na	23	539.1899	539.1899				1.0000		500.000	107.8%	
→ Mg	24	1078.8102	1078.8102				1.0000		1000.000	107.9%	
→ Al	27	51.2783	51.2783				1.0000		50.000	102.6%	
→ K	39	528.1594	528.1594				1.0000		500.000	105.6%	
→ Ca	44	1185.1360	1185.1360				1.0000		1000.000	118.5%	
> Sc	45	1403496.6250					1.0000			101.6%	
→ Cr	52	10.4673	10.4673				1.0000		10.000	104.7%	
→ Cr	53	12.0933	12.0933				1.0000		10.000	120.9%	
→ Ni	60	10.3486	10.3486				1.0000		10.000	103.5%	
→ Ni	62	10.5755	10.5755				1.0000		10.000	105.8%	
→ Cu	65	10.6423	10.6423				1.0000		10.000	106.4%	
→ - Cu	63	10.5351	10.5351				1.0000		10.000	105.4%	
→ - Zn	68	18.2894	18.2894				1.0000		20.000	91.4%	
→ Zn-1	68	18.7299	18.7299				1.0000		20.000	93.6%	
→ Zn	68	18.7164	18.7164				1.0000		20.000	93.6%	
→ As-1	75	8.8247	8.8247				1.0000		10.000	88.2%	
→ As	75	9.2256	9.2256				1.0000		10.000	92.3%	
→ Se	77	9.8674	9.8674				1.0000		10.000	98.7%	
→ Se	82	9.1718	9.1718				1.0000		10.000	91.7%	
→ Ag	107	1.0131	1.0131				1.0000		1.000	101.3%	
→ Ag	109	1.0112	1.0112				1.0000		1.000	101.1%	
→ Cd	111	0.9338	0.9338				1.0000		1.000	93.4%	
→ Cd-1	114	0.9474	0.9474				1.0000		1.000	94.7%	
→ Cd	114	0.9418	0.9418				1.0000		1.000	94.2%	
> In	115	3733844.5000					1.0000			117.5%	
→ Sb	121	0.4841	0.4841				1.0000		0.500	96.8%	
> - Sb	123	0.4876	0.4876				1.0000		0.500	97.5%	
> Pt	195	667852.1875					1.0000			114.6%	
→ Ti	205	0.4988	0.4988				1.0000		0.500	99.8%	
→ - Pb	208	2.0291	2.0291				1.0000		2.000	101.5%	

Note : Previous CCV's in ACCESS format.

[illegible]

ICP1-011010-1
ECORP 9/21 TISSUE

		L3739-11			L3739-11							
INO3-tissue	mg/kg AR	AS	BC	%Rec	ASD	BC	%Rec	SPK	RPD			
Ag	107	1.569	1.569	98.8	1.623	1.623	102.2	1.578	3.4			
Ag	109	1.561	1.562	98.6	1.611	1.612	101.8	1.578	3.2			
		CCV9	%Rec		CCB9							
Ag	107	0.9935	99.3		0.0010							
Ag	109	0.9831	98.3		0.0008							
							BC	BC	BC	BC		
INO3-tissue	mg/kg AR	L3739-11+0	L3739-11+5	L3739-11+10	L3739-11+15		L3739-11+0	L3739-11+5	L3739-11+10	L3739-11+15		
Ag	107	0.0110	0.8539	1.584	2.416		0.0110	0.8540	1.585	2.416		
Ag	109	0.0065	0.8593	1.575	2.393		0.0080	0.8608	1.576	2.395		
INO3-tissue	mg/kg AR	L3739-11+0	L3739-11+5	% Rec	SPK1	L3739-11+10	% Rec	SPK2	L3739-11+15	% Rec	SPK3	
Ag	107	0.0110	0.8540	106.8	0.7890	1.585	99.7	1.578	2.416	101.6	2.367	
Ag	109	0.0080	0.8608	108.1	0.7890	1.576	99.4	1.578	2.395	100.8	2.367	
INO3-tissue	mg/kg AR	L3739-11+0	L3739-11+5	L3739-11+10	L3739-11+15	slope	r		SPK0	SPK1	SPK2	SPK3
Ag	107	0.0110	0.8540	1.585	2.416	1.0071	0.9996		0	0.7890	1.578	2.367
Ag	109	0.0080	0.8608	1.576	2.395	0.9983	0.9995		0	0.7890	1.578	2.367
INO3-tissue	mg/kg AR	L3739-12	BC		L3739-13	BC		L3739-14	BC		L3739-15	BC
Ag	107	0.0051	0.0052		0.0057	0.0058		0.0050	0.0051		0.0041	0.0041
Ag	109	0.0024	0.0039		0.0025	0.0040		0.0024	0.0038		0.0002	0.0017
INO3-tissue	mg/kg AR	L3739-16	BC		L3739-17	BC						
Ag	107	0.0022	0.0023		0.0230	0.0231						
Ag	109	-0.0004	0.0011		0.0199	0.0214						
		CCV10	%Rec		CCB10							
Ag	107	0.9868	98.7		0.0001							
Ag	109	0.9821	98.2		-0.0006							
HCl-tissue	mg/kg AR	IBW1	IBW2	IBW3	IBW4	MEAN						
Ag	107	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002						
Ag	109	-0.0002	-0.0002	-0.0002	-0.0002	-0.0002						

0050

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:04:33

Sample ID: CCV7

Sample Description:

Batch ID:

Sample Information

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	2612255	486.7421	ug/L
Mg	24	94	3872940	1034.6484	ug/L
K	39	881988	4517587	502.0150	ug/L
Ca	44	27945	287521	1166.5436	ug/L
Sc	45	1380986	1402403		ug/L
Cr	52	4898	89243	10.2306	ug/L
Cr	53	2424	11923	9.5565	ug/L
Ni	60	13	22487	10.1822	ug/L
Ni	62	373	3733	10.1464	ug/L
Cu	65	114	24861	10.3959	ug/L
Cu	63	284	52155	10.3302	ug/L
Zn	66	197	29350	18.7584	ug/L
Zn-1	68	218	20758	18.9584	ug/L
Zn	68	205	20328	18.9510	ug/L
As-1	75	6291	22918	9.0098	ug/L
As	75	43	17164	9.4442	ug/L
Ag	107	24	8474	1.0133	ug/L
Ag	109	25	8235	1.0321	ug/L
Cd	111	4	2166	0.9865	ug/L
Cd-1	114	101	5113	0.9800	ug/L
Cd	114	96	5080	0.9871	ug/L
In	115	3177913	3593025		ug/L
Pt	195	582536	659924		ug/L
Pb	208	927	56171	2.0347	ug/L
C	13	3657	4168		ug/L
N	14	5792252	4680203		ug/L
P	31	11637	10636		ug/L
S	34	244120	280936		ug/L
Cl	35	110856	121059		ug/L
Br	81	10127	15333		ug/L
Kr	83	101	94		ug/L
Ba	136	149	22267		ug/L
Se	78	6476	10677		ug/L
Mo	98	15	23767		ug/L
Cd	106	7	189		ug/L
Sn	118	52	66		ug/L
Se	77	103	1373	34578164.0550	ug/L
Se	82	-9	1723	35102971.3285	ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:09:08

Sample ID: CCB7

Sample Description:

Batch ID:

Sample Information

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	8598	-0.6964	ug/L
Mg	24	94	255	0.0438	ug/L
K	39	881988	890565	1.7924	ug/L
Ca	44	27945	19798	-36.8459	ug/L
> Sc	45	1380986	1374767		ug/L
Cr	52	4898	5652	0.0960	ug/L
Cr	53	2424	1962	-0.4656	ug/L
Ni	60	13	23	0.0049	ug/L
Ni	62	373	404	0.0986	ug/L
Cu	65	114	128	0.0060	ug/L
Cu	63	284	254	-0.0058	ug/L
Zn	66	197	170	-0.0309	ug/L
Zn-1	68	218	189	-0.0485	ug/L
Zn	68	205	176	-0.0485	ug/L
As-1	75	6291	6367	-0.3251	ug/L
As	75	43	43	-0.0033	ug/L
Ag	107	24	44	0.0022	ug/L
Ag	109	25	41	0.0016	ug/L
Cd	111	4	7	0.0012	ug/L
Cd-1	114	101	71	-0.0082	ug/L
Cd	114	96	69	-0.0074	ug/L
> In	115	3177913	3498224		ug/L
> Pt	195	582536	640625		ug/L
Pb	208	927	1016	-0.0001	ug/L
C	13	3657	3613		ug/L
N	14	5792252	4721271		ug/L
P	31	11637	11634		ug/L
S	34	244120	280895		ug/L
Cl	35	110856	117100		ug/L
Br	81	10127	13820		ug/L
Kr	83	101	108		ug/L
Ba	136	149	126		ug/L
Se	78	6476	6584		ug/L
Mo	98	15	29		ug/L
Cd	106	7	19		ug/L
Sn	118	52	68		ug/L
Se	77	103	127	642821.1069	ug/L
Se	82	-9	-5	83158.9079	ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:13:44

Sample ID: RINSE

Sample Description:

Batch ID:

Sample Information

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	15243	0.3473	ug/L
Mg	24	94	3204	0.7804	ug/L
K	39	881988	1017345	8.6285	ug/L
Ca	44	27945	41281	47.6093	ug/L
> Sc	45	1380986	1489220		ug/L
Cr	52	4898	85272	9.1541	ug/L
Cr	53	2424	453708	429.6029	ug/L
Ni	60	13	111	0.0416	ug/L
Ni	62	373	465	0.1770	ug/L
Cu	65	114	176	0.0210	ug/L
Cu	63	284	258	-0.0090	ug/L
Zn	66	197	666	0.2659	ug/L
Zn-1	68	218	890	0.5572	ug/L
Zn	68	205	876	0.5696	ug/L
As-1	75	6291	2525	-2.6723	ug/L
As	75	43	-2598	-1.3909	ug/L
Ag	107	24	229	0.0230	ug/L
Ag	109	25	222	0.0231	ug/L
Cd	111	4	25	0.0086	ug/L
Cd-1	114	101	79	-0.0077	ug/L
Cd	114	96	65	-0.0093	ug/L
> In	115	3177913	3761676		ug/L
> Pt	195	582536	694519		ug/L
Pb	208	927	688	-0.0146	ug/L
C	13	3657	4907		ug/L
N	14	5792252	2217684		ug/L
P	31	11637	7533		ug/L
S	34	244120	284207		ug/L
Cl	35	110856	194689163		ug/L
Br	81	10127	312161		ug/L
Kr	83	101	144		ug/L
Ba	136	149	181		ug/L
Se	78	6476	7382		ug/L
Mo	98	15	34		ug/L
Cd	106	7	15		ug/L
Sn	118	52	2162		ug/L
Se	77	103	529741439403884.1980		ug/L
Se	82	-9	692 14213819.6922		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:18:21

Sample ID: RINSE

Sample Description:

Batch ID:

Sample Information

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	6513	-1.0512	ug/L
Mg	24	94	158	0.0189	ug/L
K	39	881988	850442	0.3135	ug/L
Ca	44	27945	36020	43.3858	ug/L
> Sc	45	1380986	1328489		ug/L
Cr	52	4898	6696	0.2541	ug/L
Cr	53	2424	28779	28.1615	ug/L
Ni	60	13	16	0.0017	ug/L
Ni	62	373	398	0.1221	ug/L
Cu	65	114	123	0.0056	ug/L
Cu	63	284	260	-0.0027	ug/L
Zn	66	197	230	0.0087	ug/L
Zn-1	68	218	431	0.1821	ug/L
Zn	68	205	418	0.1869	ug/L
As-1	75	6291	6240	-0.3882	ug/L
As	75	43	-32	-0.0461	ug/L
Ag	107	24	13	-0.0017	ug/L
Ag	109	25	12	-0.0020	ug/L
Cd	111	4	1	-0.0016	ug/L
Cd-1	114	101	61	-0.0102	ug/L
Cd	114	96	50	-0.0113	ug/L
> In	115	3177913	3486445		ug/L
> Pt	195	582536	655315		ug/L
Pb	208	927	2201	0.0431	ug/L
C	13	3657	3304		ug/L
N	14	5792252	4001037		ug/L
P	31	11637	9357		ug/L
S	34	244120	257308		ug/L
Cl	35	110856	730224		ug/L
Br	81	10127	13172		ug/L
Kr	83	101	89		ug/L
Ba	136	149	176		ug/L
Se	78	6476	6517		ug/L
Mo	98	15	11		ug/L
Cd	106	7	2		ug/L
Sn	118	52	151		ug/L
Se	77	103	699	16222217.6475	ug/L
Se	82	-9	10	368190.8464	ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:22:56

Sample ID: IBW1

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5929	-0.0957	ug/L
Mg	24	94	185	0.0020	ug/L
K	39	881988	865824	-0.0477	ug/L
Ca	44	27945	31495	1.4487	ug/L
Sc	45	1380986	1363236		ug/L
Ag	107	24	15	-0.0001	ug/L
Ag	109	25	10	-0.0002	ug/L
In	115	3177913	3552417		ug/L
C	13	3657	3587		ug/L
N	14	5792252	3821349		ug/L
P	31	11637	8259		ug/L
S	34	244120	258285		ug/L
Cl	35	110856	281879		ug/L
Br	81	10127	13008		ug/L
Kr	83	101	83		ug/L
Sn	118	52	67		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:25:50

Sample ID: IBW2

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5901	-0.0954	ug/L
Mg	24	94	183	0.0020	ug/L
K	39	881988	873193	0.1164	ug/L
Ca	44	27945	30397	1.1382	ug/L
Sc	45	1380986	1351730		ug/L
Ag	107	24	16	-0.0001	ug/L
Ag	109	25	13	-0.0002	ug/L
In	115	3177913	3522184		ug/L
C	13	3657	3651		ug/L
N	14	5792252	3566458		ug/L
P	31	11637	7972		ug/L
S	34	244120	264220		ug/L
Cl	35	110856	206899		ug/L
Br	81	10127	11670		ug/L
Kr	83	101	139		ug/L
Sn	118	52	62		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:28:45

Sample ID: IBW3

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5887	-0.0947	ug/L
Mg	24	94	226	0.0030	ug/L
K	39	881988	872017	0.1874	ug/L
Ca	44	27945	29295	0.8246	ug/L
Sc	45	1380986	1340143		ug/L
Ag	107	24	16	-0.0001	ug/L
Ag	109	25	13	-0.0002	ug/L
In	115	3177913	3469185		ug/L
C	13	3657	3709		ug/L
N	14	5792252	3591039		ug/L
P	31	11637	7453		ug/L
S	34	244120	259296		ug/L
Cl	35	110856	175771		ug/L
Br	81	10127	12129		ug/L
Kr	83	101	108		ug/L
Sn	118	52	53		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:31:41

Sample ID: IBW4

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5546	-0.1027	ug/L
Mg	24	94	167	0.0016	ug/L
K	39	881988	876129	-0.0435	ug/L
Ca	44	27945	28325	0.1505	ug/L
Sc	45	1380986	1380582		ug/L
Ag	107	24	14	-0.0001	ug/L
Ag	109	25	10	-0.0002	ug/L
In	115	3177913	3603885		ug/L
C	13	3657	3781		ug/L
N	14	5792252	3698916		ug/L
P	31	11637	7886		ug/L
S	34	244120	268078		ug/L
Cl	35	110856	156520		ug/L
Br	81	10127	12109		ug/L
Kr	83	101	136		ug/L
Sn	118	52	55		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:34:37

Sample ID: PBT1

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	83432	10.5447	ug/L
Mg	24	94	566	0.0999	ug/L
K	39	881988	862032	-4.3434	ug/L
Ca	44	27945	28631	0.2508	ug/L
Sc	45	1380986	1411609		ug/L
Ag	107	24	27	-0.0000	ug/L
Ag	109	25	16	-0.0013	ug/L
In	115	3177913	3657836		ug/L
C	13	3657	3503		ug/L
N	14	5792252	9659499		ug/L
P	31	11637	19907		ug/L
S	34	244120	284134		ug/L
Cl	35	110856	164284		ug/L
Br	81	10127	12971		ug/L
Kr	83	101	114		ug/L
Sn	118	52	47		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:37:34

Sample ID: PBT2

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	57232	6.6246	ug/L
Mg	24	94	426	0.0698	ug/L
K	39	881988	859255	-4.8937	ug/L
Ca	44	27945	28105	-1.8471	ug/L
Sc	45	1380986	1415513		ug/L
Ag	107	24	24	-0.0003	ug/L
Ag	109	25	12	-0.0017	ug/L
In	115	3177913	3638716		ug/L
C	13	3657	3648		ug/L
N	14	5792252	9385738		ug/L
P	31	11637	21429		ug/L
S	34	244120	275895		ug/L
Cl	35	110856	156162		ug/L
Br	81	10127	13183		ug/L
Kr	83	101	117		ug/L
Sn	118	52	43		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:40:31

Sample ID: PBT3

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	61281	7.1346	ug/L
Mg	24	94	656	0.1168	ug/L
K	39	881988	855219	-6.1253	ug/L
Ca	44	27945	27852	-3.6466	ug/L
Sc	45	1380986	1427327		ug/L
Ag	107	24	27	-0.0001	ug/L
Ag	109	25	15	-0.0014	ug/L
In	115	3177913	3653646		ug/L
C	13	3657	3378		ug/L
N	14	5792252	10688166		ug/L
P	31	11637	24558		ug/L
S	34	244120	293241		ug/L
Cl	35	110856	147478		ug/L
Br	81	10127	13236		ug/L
Kr	83	101	128		ug/L
Sn	118	52	59		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:43:28

Sample ID: PBT4

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	53835	6.2578	ug/L
Mg	24	94	386	0.0626	ug/L
K	39	881988	862322	-2.9220	ug/L
Ca	44	27945	27574	-2.0549	ug/L
Sc	45	1380986	1391457		ug/L
Ag	107	24	29	0.0002	ug/L
Ag	109	25	13	-0.0016	ug/L
In	115	3177913	3572797		ug/L
C	13	3657	3300		ug/L
N	14	5792252	9482001		ug/L
P	31	11637	17998		ug/L
S	34	244120	276795		ug/L
Cl	35	110856	139740		ug/L
Br	81	10127	12713		ug/L
Kr	83	101	131		ug/L
Sn	118	52	52		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:46:27

Sample ID: DOLT-2

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 247

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	27135617	7701.5061	ug/L
Mg	24	94	2302505	932.7324	ug/L
K	39	881988	45353326	9332.3786	ug/L
Ca	44	27945	145685	787.8316	ug/L
Sc	45	1380986	1497654		ug/L
Ag	107	24	3715	0.6570	ug/L
Ag	109	25	3409	0.6312	ug/L
In	115	3177913	3919029		ug/L
C	13	3657	52421		ug/L
N	14	5792252	9552202		ug/L
P	31	11637	1788035		ug/L
S	34	244120	559908		ug/L
Cl	35	110856	323546		ug/L
Br	81	10127	25855		ug/L
Kr	83	101	81		ug/L
Sn	118	52	787		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:49:25

Sample ID: DORM-2

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 246

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	16538080	4822.7058	ug/L
Mg	24	94	2581182	1074.8963	ug/L
K	39	881988	76568481	16341.1877	ug/L
Ca	44	27945	116816	612.0321	ug/L
Sc	45	1380986	1463044		ug/L
Ag	107	24	290	0.0467	ug/L
Ag	109	25	223	0.0361	ug/L
In	115	3177913	3906126		ug/L
C	13	3657	43602		ug/L
N	14	5792252	10078794		ug/L
P	31	11637	1762934		ug/L
S	34	244120	441564		ug/L
Cl	35	110856	491701		ug/L
Br	81	10127	29052		ug/L
Kr	83	101	111		ug/L
Sn	118	52	151		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:52:24

Sample ID: CCV8

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	2729885	505.4450	ug/L
Mg	24	94	3866631	1026.2020	ug/L
K	39	881988	4527238	499.3116	ug/L
Ca	44	27945	289060	1164.8353	ug/L
Sc	45	1380986	1411722		ug/L
Ag	107	24	8626	0.9989	ug/L
Ag	109	25	8202	0.9954	ug/L
In	115	3177913	3710419		ug/L
C	13	3657	4626		ug/L
N	14	5792252	5623341		ug/L
P	31	11637	12087		ug/L
S	34	244120	268622		ug/L
Cl	35	110856	161969		ug/L
Br	81	10127	12627		ug/L
Kr	83	101	139		ug/L
Sn	118	52	76		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:55:23

Sample ID: CCB8

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	6064	-1.1839	ug/L
Mg	24	94	213	0.0325	ug/L
K	39	881988	885315	0.6008	ug/L
Ca	44	27945	26690	-5.5644	ug/L
Sc	45	1380986	1379545		ug/L
Ag	107	24	36	0.0010	ug/L
Ag	109	25	26	-0.0003	ug/L
In	115	3177913	3590572		ug/L
C	13	3657	4126		ug/L
N	14	5792252	5869043		ug/L
P	31	11637	13570		ug/L
S	34	244120	278959		ug/L
Cl	35	110856	138761		ug/L
Br	81	10127	12674		ug/L
Kr	83	101	117		ug/L
Sn	118	52	56		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 16:58:21

Sample ID: BLK SPK

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	81951	10.1422	ug/L
Mg	24	94	544	0.0933	ug/L
K	39	881988	872516	-4.5668	ug/L
Ca	44	27945	27102	-6.6344	ug/L
Sc	45	1380986	1432109		ug/L
Ag	107	24	9178	0.8494	ug/L
Ag	109	25	8670	0.8410	ug/L
In	115	3177913	3711345		ug/L
C	13	3657	3581		ug/L
N	14	5792252	10908709		ug/L
P	31	11637	20261		ug/L
S	34	244120	283355		ug/L
Cl	35	110856	138514		ug/L
Br	81	10127	12365		ug/L
Kr	83	101	108		ug/L
Sn	118	52	55		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:01:20

Sample ID: ML SPK

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	1410470	200.0684	ug/L
Mg	24	94	490	0.0796	ug/L
K	39	881988	2771886	194.4613	ug/L
Ca	44	27945	26513	-10.9486	ug/L
Sc	45	1380986	1467299		ug/L
Ag	107	24	5736	0.5149	ug/L
Ag	109	25	5464	0.5140	ug/L
In	115	3177913	3822095		ug/L
C	13	3657	3831		ug/L
N	14	5792252	10657252		ug/L
P	31	11637	21616		ug/L
S	34	244120	283495		ug/L
Cl	35	110856	133916		ug/L
Br	81	10127	13177		ug/L
Kr	83	101	94		ug/L
Sn	118	52	3822		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:04:20

Sample ID: L3739-10

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 491

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	6856845	992.5304	ug/L
Mg	24	94	1449580	299.9643	ug/L
K	39	881988	39730180	4164.3063	ug/L
Ca	44	27945	1219631	4149.0379	ug/L
Sc	45	1380986	1474757		ug/L
Ag	107	24	190	0.0143	ug/L
Ag	109	25	122	0.0084	ug/L
In	115	3177913	3927819		ug/L
C	13	3657	25418		ug/L
N	14	5792252	10999626		ug/L
P	31	11637	1513462		ug/L
S	34	244120	395311		ug/L
Cl	35	110856	180894		ug/L
Br	81	10127	16023		ug/L
Kr	83	101	136		ug/L
Sn	118	52	428		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:07:16

Sample ID: L3739-11

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4351627	612.9321	ug/L
Mg	24	94	1424330	287.0885	ug/L
K	39	881988	34284091	3487.0190	ug/L
Ca	44	27945	1485898	4945.7315	ug/L
Sc	45	1380986	1466403		ug/L
Ag	107	24	142	0.0099	ug/L
Ag	109	25	83	0.0048	ug/L
In	115	3177913	3858684		ug/L
C	13	3657	33963		ug/L
N	14	5792252	9720190		ug/L
P	31	11637	1596937		ug/L
S	34	244120	359398		ug/L
Cl	35	110856	203027		ug/L
Br	81	10127	20210		ug/L
Kr	83	101	139		ug/L
Sn	118	52	133		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:10:10

Sample ID: L3739-11 MD

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 506

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4298837	583.9894	ug/L
Mg	24	94	1289311	250.6880	ug/L
K	39	881988	34858612	3418.2627	ug/L
Ca	44	27945	868450	2744.2751	ug/L
Sc	45	1380986	1523198		ug/L
Ag	107	24	142	0.0095	ug/L
Ag	109	25	95	0.0056	ug/L
In	115	3177913	3989341		ug/L
C	13	3657	37176		ug/L
N	14	5792252	9535950		ug/L
P	31	11637	1242534		ug/L
S	34	244120	362756		ug/L
Cl	35	110856	228047		ug/L
Br	81	10127	21290		ug/L
Kr	83	101	100		ug/L
Sn	118	52	291		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:13:03

Sample ID: L3739-11 MS

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 500

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4783465	666.4232	ug/L
Mg	24	94	1546428	308.2568	ug/L
K	39	881988	38892152	3922.5921	ug/L
Ca	44	27945	1453415	4779.1661	ug/L
Sc	45	1380986	1503803		ug/L
Ag	107	24	24352	2.1227	ug/L
Ag	109	25	23258	2.1257	ug/L
In	115	3177913	3954794		ug/L
C	13	3657	37739		ug/L
N	14	5792252	9849428		ug/L
P	31	11637	1665280		ug/L
S	34	244120	381422		ug/L
Cl	35	110856	169565		ug/L
Br	81	10127	17186		ug/L
Kr	83	101	111		ug/L
Sn	118	52	160		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:15:57

Sample ID: L3739-11 MSD

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 502

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4463068	617.0414	ug/L
Mg	24	94	1417594	280.4521	ug/L
K	39	881988	36296562	3626.9167	ug/L
Ca	44	27945	1058528	3426.8264	ug/L
Sc	45	1380986	1509777		ug/L
Ag	107	24	23294	2.0070	ug/L
Ag	109	25	22128	1.9989	ug/L
In	115	3177913	3982765		ug/L
C	13	3657	37449		ug/L
N	14	5792252	9547135		ug/L
P	31	11637	1421213		ug/L
S	34	244120	395804		ug/L
Cl	35	110856	172490		ug/L
Br	81	10127	18151		ug/L
Kr	83	101	103		ug/L
Sn	118	52	248		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:18:51

Sample ID: RINSE

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	8002	-0.8905	ug/L
Mg	24	94	188	0.0229	ug/L
K	39	881988	873959	-7.1137	ug/L
Ca	44	27945	26680	-11.6850	ug/L
> Sc	45	1380986	1452195		ug/L
Ag	107	24	52	0.0027	ug/L
Ag	109	25	51	0.0026	ug/L
> In	115	3177913	3751392		ug/L
C	13	3657	4348		ug/L
N	14	5792252	13238666		ug/L
P	31	11637	26267		ug/L
S	34	244120	289185		ug/L
Cl	35	110856	130751		ug/L
Br	81	10127	13258		ug/L
Kr	83	101	97		ug/L
Sn	118	52	50		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:21:44

Sample ID: L3739-11 AS

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	10344299	1428.4309	ug/L
Mg	24	94	1529896	301.8253	ug/L
K	39	881988	45360205	4544.8469	ug/L
Ca	44	27945	1598949	5214.4638	ug/L
Sc	45	1380986	1497912		ug/L
Ag	107	24	18455	1.5692	ug/L
Ag	109	25	17512	1.5609	ug/L
In	115	3177913	3991235		ug/L
C	13	3657	37042		ug/L
N	14	5792252	9483182		ug/L
P	31	11637	1744899		ug/L
S	34	244120	377180		ug/L
Cl	35	110856	178842		ug/L
Br	81	10127	18463		ug/L
Kr	83	101	111		ug/L
Sn	118	52	159		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:24:39

Sample ID: L3739-11 ASD

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	10435287	1470.1562	ug/L
Mg	24	94	1550055	311.9722	ug/L
K	39	881988	45568718	4660.1553	ug/L
Ca	44	27945	1597951	5318.8254	ug/L
Sc	45	1380986	1468289		ug/L
Ag	107	24	18783	1.6229	ug/L
Ag	109	25	17792	1.6110	ug/L
In	115	3177913	3930506		ug/L
C	13	3657	37070		ug/L
N	14	5792252	9492456		ug/L
P	31	11637	1753880		ug/L
S	34	244120	381748		ug/L
Cl	35	110856	182246		ug/L
Br	81	10127	19640		ug/L
Kr	83	101	114		ug/L
Sn	118	52	161		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:27:33

Sample ID: RINSE

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	8068	-0.9305	ug/L
Mg	24	94	197	0.0235	ug/L
K	39	881988	879054	-10.5937	ug/L
Ca	44	27945	26181	-17.9068	ug/L
Sc	45	1380986	1504851		ug/L
Ag	107	24	56	0.0029	ug/L
Ag	109	25	54	0.0027	ug/L
In	115	3177913	3871014		ug/L
C	13	3657	4548		ug/L
N	14	5792252	13190384		ug/L
P	31	11637	25666		ug/L
S	34	244120	286015		ug/L
Cl	35	110856	134034		ug/L
Br	81	10127	13962		ug/L
Kr	83	101	75		ug/L
Sn	118	52	44		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:30:29

Sample ID: CCV9

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	2822890	511.6137	ug/L
Mg	24	94	3974382	1032.4304	ug/L
K	39	881988	4605282	496.5693	ug/L
Ca	44	27945	296263	1169.0667	ug/L
Sc	45	1380986	1442365		ug/L
Ag	107	24	8735	0.9935	ug/L
Ag	109	25	8248	0.9830	ug/L
In	115	3177913	3778141		ug/L
C	13	3657	4187		ug/L
N	14	5792252	5883856		ug/L
P	31	11637	13264		ug/L
S	34	244120	268834		ug/L
Cl	35	110856	123482		ug/L
Br	81	10127	12643		ug/L
Kr	83	101	125		ug/L
Sn	118	52	80		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:33:26

Sample ID: CCB9

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5146	-1.3809	ug/L
Mg	24	94	181	0.0217	ug/L
K	39	881988	886590	-1.7697	ug/L
Ca	44	27945	24834	-16.4725	ug/L
Sc	45	1380986	1412289		ug/L
Ag	107	24	36	0.0010	ug/L
Ag	109	25	36	0.0008	ug/L
In	115	3177913	3697248		ug/L
C	13	3657	4320		ug/L
N	14	5792252	6432131		ug/L
P	31	11637	13178		ug/L
S	34	244120	269110		ug/L
Cl	35	110856	118945		ug/L
Br	81	10127	12424		ug/L
Kr	83	101	97		ug/L
Sn	118	52	61		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:36:22

Sample ID: L3739-11+0

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4670021	657.3661	ug/L
Mg	24	94	1527262	307.6717	ug/L
K	39	881988	36670738	3732.9763	ug/L
Ca	44	27945	1568294	5221.5465	ug/L
Sc	45	1380986	1468291		ug/L
Ag	107	24	154	0.0110	ug/L
Ag	109	25	101	0.0065	ug/L
In	115	3177913	3879213		ug/L
C	13	3657	36649		ug/L
N	14	5792252	9867998		ug/L
P	31	11637	1704221		ug/L
S	34	244120	378280		ug/L
Cl	35	110856	171219		ug/L
Br	81	10127	18927		ug/L
Kr	83	101	142		ug/L
Sn	118	52	156		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:39:18

Sample ID: L3739-11+10 5 10/11/01 ABJ

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	7890119	1119.1028	ug/L
Mg	24	94	1534385	311.0251	ug/L
K	39	881988	41354609	4251.3553	ug/L
Ca	44	27945	1556989	5217.5773	ug/L
Sc	45	1380986	1457901		ug/L
Ag	107	24	9961	0.8539	ug/L
Ag	109	25	9566	0.8593	ug/L
In	115	3177913	3955025		ug/L
C	13	3657	36677		ug/L
N	14	5792252	9817870		ug/L
P	31	11637	1712098		ug/L
S	34	244120	383818		ug/L
Cl	35	110856	176120		ug/L
Br	81	10127	17798		ug/L
Kr	83	101	117		ug/L
Sn	118	52	153		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:42:15

Sample ID: L3739-11+20 JO 10/11/01 ASD

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	10498232	1459.9969	ug/L
Mg	24	94	1529313	303.8355	ug/L
K	39	881988	45616152	4604.0034	ug/L
Ca	44	27945	1583260	5199.5860	ug/L
Sc	45	1380986	1487912		ug/L
Ag	107	24	18490	1.5845	ug/L
Ag	109	25	17533	1.5749	ug/L
In	115	3177913	3961642		ug/L
C	13	3657	36987		ug/L
N	14	5792252	9632514		ug/L
P	31	11637	1730311		ug/L
S	34	244120	389568		ug/L
Cl	35	110856	179848		ug/L
Br	81	10127	18524		ug/L
Kr	83	101	94		ug/L
Sn	118	52	169		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:45:12

Sample ID: L3739-11+30 K

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

10/11/01, ABN

Initial Sample Quantity (mg): 507

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	12962349	1861.0129	ug/L
Mg	24	94	1507602	309.2342	ug/L
K	39	881988	48254162	5038.0247	ug/L
Ca	44	27945	1552836	5266.4136	ug/L
Sc	45	1380986	1441671		ug/L
Ag	107	24	27210	2.4159	ug/L
Ag	109	25	25714	2.3934	ug/L
In	115	3177913	3827716		ug/L
C	13	3657	36917		ug/L
N	14	5792252	10271642		ug/L
P	31	11637	1674040		ug/L
S	34	244120	367861		ug/L
Cl	35	110856	174602		ug/L
Br	81	10127	18643		ug/L
Kr	83	101	128		ug/L
Sn	118	52	158		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:48:07

Sample ID: RINSE

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	8069	-0.8984	ug/L
Mg	24	94	188	0.0224	ug/L
K	39	881988	874368	-8.6308	ug/L
Ca	44	27945	25783	-17.1171	ug/L
Sc	45	1380986	1471421		ug/L
Ag	107	24	66	0.0041	ug/L
Ag	109	25	54	0.0027	ug/L
In	115	3177913	3840160		ug/L
C	13	3657	4784		ug/L
N	14	5792252	13224411		ug/L
P	31	11637	29024		ug/L
S	34	244120	279934		ug/L
Cl	35	110856	128660		ug/L
Br	81	10127	14251		ug/L
Kr	83	101	139		ug/L
Sn	118	52	40		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:51:01

Sample ID: L3739-12

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 508

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	7036991	979.1410	ug/L
Mg	24	94	2223813	442.3373	ug/L
K	39	881988	34489260	3461.1008	ug/L
Ca	44	27945	3726283	12386.5755	ug/L
Sc	45	1380986	1483035		ug/L
Ag	107	24	89	0.0051	ug/L
Ag	109	25	58	0.0024	ug/L
In	115	3177913	3927949		ug/L
C	13	3657	29531		ug/L
N	14	5792252	11058620		ug/L
P	31	11637	3050089		ug/L
S	34	244120	363236		ug/L
Cl	35	110856	200356		ug/L
Br	81	10127	18838		ug/L
Kr	83	101	108		ug/L
Sn	118	52	153		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:53:59

Sample ID: L3739-13

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 501

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5166933	750.9887	ug/L
Mg	24	94	2217963	460.3499	ug/L
K	39	881988	33841263	3551.3754	ug/L
Ca	44	27945	4243726	14763.6076	ug/L
Sc	45	1380986	1439121		ug/L
Ag	107	24	92	0.0057	ug/L
Ag	109	25	57	0.0025	ug/L
In	115	3177913	3817158		ug/L
C	13	3657	41012		ug/L
N	14	5792252	12097163		ug/L
P	31	11637	3281487		ug/L
S	34	244120	355969		ug/L
Cl	35	110856	232249		ug/L
Br	81	10127	20739		ug/L
Kr	83	101	144		ug/L
Sn	118	52	135		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:56:58

Sample ID: L3739-14

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 501

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5464356	775.0413	ug/L
Mg	24	94	1646398	334.0280	ug/L
K	39	881988	33443734	3420.3346	ug/L
Ca	44	27945	2172000	7322.1203	ug/L
Sc	45	1380986	1474341		ug/L
Ag	107	24	86	0.0050	ug/L
Ag	109	25	57	0.0023	ug/L
In	115	3177913	3914999		ug/L
C	13	3657	28851		ug/L
N	14	5792252	11090866		ug/L
P	31	11637	2034341		ug/L
S	34	244120	370741		ug/L
Cl	35	110856	197678		ug/L
Br	81	10127	16454		ug/L
Kr	83	101	139		ug/L
Sn	118	52	209		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 17:59:56

Sample ID: L3739-15

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 504

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	4427714	611.4409	ug/L
Mg	24	94	1671589	330.3245	ug/L
K	39	881988	34067123	3394.5198	ug/L
Ca	44	27945	1863448	6103.9278	ug/L
Sc	45	1380986	1504530		ug/L
Ag	107	24	77	0.0040	ug/L
Ag	109	25	33	0.0002	ug/L
In	115	3177913	3945551		ug/L
C	13	3657	31603		ug/L
N	14	5792252	11348440		ug/L
P	31	11637	1904963		ug/L
S	34	244120	393881		ug/L
Cl	35	110856	156616		ug/L
Br	81	10127	15948		ug/L
Kr	83	101	139		ug/L
Sn	118	52	221		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 18:02:56

Sample ID: L3739-16

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 508

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5741784	818.8665	ug/L
Mg	24	94	1644877	335.4359	ug/L
K	39	881988	33670590	3464.4024	ug/L
Ca	44	27945	2128647	7213.3085	ug/L
Sc	45	1380986	1446876		ug/L
Ag	107	24	54	0.0022	ug/L
Ag	109	25	27	-0.0004	ug/L
In	115	3177913	3887082		ug/L
C	13	3657	30244		ug/L
N	14	5792252	11267956		ug/L
P	31	11637	2011734		ug/L
S	34	244120	385652		ug/L
Cl	35	110856	143128		ug/L
Br	81	10127	15767		ug/L
Kr	83	101	106		ug/L
Sn	118	52	260		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 18:05:55

Sample ID: L3739-17

Batch ID: ECORP 9/21 (HNO3-TISSUE)

Sample Information

Initial Sample Quantity (mg): 499

Sample Prep Volume (L): 0.040

Aliquot Volume (mL): 1.000

Diluted To Volume (mL): 10.0

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	13714101	1945.8319	ug/L
Mg	24	94	4941493	1001.4019	ug/L
K	39	881988	19586670	1959.8807	ug/L
Ca	44	27945	11505996	39188.7035	ug/L
Sc	45	1380986	1481659		ug/L
Ag	107	24	289	0.0230	ug/L
Ag	109	25	245	0.0199	ug/L
In	115	3177913	3887848		ug/L
C	13	3657	17044		ug/L
N	14	5792252	11289145		ug/L
P	31	11637	1468766		ug/L
S	34	244120	337082		ug/L
Cl	35	110856	214856		ug/L
Br	81	10127	45287		ug/L
Kr	83	101	150		ug/L
Sn	118	52	248		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 18:08:55

Sample ID: CCV10

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	2899298	516.8344	ug/L
Mg	24	94	4038352	1031.8514	ug/L
K	39	881988	4682787	496.5686	ug/L
Ca	44	27945	296146	1147.0872	ug/L
Sc	45	1380986	1466623		ug/L
Ag	107	24	8773	0.9868	ug/L
Ag	109	25	8331	0.9821	ug/L
In	115	3177913	3820066		ug/L
C	13	3657	4748		ug/L
N	14	5792252	5974108		ug/L
P	31	11637	13013		ug/L
S	34	244120	289791		ug/L
Cl	35	110856	127840		ug/L
Br	81	10127	13931		ug/L
Kr	83	101	128		ug/L
Sn	118	52	73		ug/L

Quantitative Analysis Summary

Sample Date/Time: Wednesday, October 10, 2001 18:11:53

Sample ID: CCB10

Batch ID:

Sample Information

Initial Sample Quantity (mg):

Sample Prep Volume (L):

Aliquot Volume (mL):

Diluted To Volume (mL):

Summary

Analyte	Mass	Blank Intensity	Samp. Intensity	Samp. Conc.	Sample Unit
Na	23	12299	5112	-1.3779	ug/L
Mg	24	94	216	0.0323	ug/L
K	39	881988	926437	4.6514	ug/L
Ca	44	27945	24062	-19.0543	ug/L
Sc	45	1380986	1398227		ug/L
Ag	107	24	28	0.0000	ug/L
Ag	109	25	24	-0.0006	ug/L
In	115	3177913	3658249		ug/L
C	13	3657	4209		ug/L
N	14	5792252	5772480		ug/L
P	31	11637	12185		ug/L
S	34	244120	291095		ug/L
Cl	35	110856	121275		ug/L
Br	81	10127	11481		ug/L
Kr	83	101	103		ug/L
Sn	118	52	58		ug/L

		ICP-MS Benchsheet			
Dataset:		ICP1-011010-1			
Analyst:		ABN			
Client	AS pos#	Sample ID	Dilution	Wt [mg]	Digest Vol [L]
		Curve: TM-4: TM4-50-6			
		TM-6: TM5-1-2			
		TM-16: TM5-1-1			
		ICV: FGERCCAL-1: TM4-27-14			
		FGERCCAL-2: TM4-27-10			
		ALKALI: TM4-24-10			
		B-2:			
	9	1BW1			
	10	2			
	11	3			
	12	4			
	13	NIST 1640	SX		
	14	CRM TMDW	↓		
	15	1BW1			
	16	2			
	17	3			
	18	4			
	19	PBW1			
	20	2			
	21	3			
	22	4			
	23	ML Spike			
	24	MW1 AMR -T			
	25	MD			

	26.	MWI AMR-TMS			
	27	MSD	} 2nd TN416/16		
	28	MWI AMR-D			
	29	AMR Blk-MWS-T			
	30	-D			
	31	AMR MWS-T			
	32	-D			
	33	Airport Blk-MWI-D			
	34	Airport MWI-D			
	35	Airport MW-3-D			
	36	Blk	} insert at end of bulge	2X	
	37	Inf			
	38	WWTP Blk			
	39	90541			
	40	90540			
	41	1BW1			
	42	2			
	43	3			
	44	4			
	45	PBW1			
	46	2			
	47	3			
	48	4			
	49	ML Spike			
	50	Blk-T			
	51	-D			
	52	474 -T		2X	

	53	474e - TMD	2X		
	54	MS	}		
	55	MSD			
	56	-D			
	57	474e - T + O			
	58	10 μ l T44/6/16			
	59	20			
	60	30			
	61	63rd - T			
	62	-D			
	63	EFF-T			
	64	-D			
	65	Plant #1 - T			
	66	-D			
	67	RP-4 Inflow			
	68	RP - 1/4 002 Effluent			
	69	CCWRF Inflow			
	70	RP-1 001 Effluent			
	71	RP-1 Inflow			
	72	CCWRF Effluent	✓		
	73	BW1		500	0.040
	74	2			
	75	3			
	76	4			
	77	PBT1	10X		
	78	2	↓		
	79	3	↓		

80.	PBT4	10X	500	0.040
81	Dalt - 2		247	
82	Dorm - 2		246	
83	Bel Spk		500	
84	ML Spike		↓	
85	L 3739 - 10		491	
86	11		507	
87	11 MD		506	
88	MS		500	
89	MSD		502	
90	AS } 10ml TM-G		507	
91	↓ ASD }			
92	L-3739 - 11 + 0			
93	5			
94	10			
95	15 ↓			
96	L 3739 - 12		508	
97	13		501	
98	14		501	
99	15		504	
100	16		508	
101	↓ 17	✓	499	↓
102	1BW1		500	0.040
103	2			
104	3			
105	4			
106	PBT1	10X	↓	↓

Tissue Digestion

10mls of acid added to 40 ml vial.
Filled to a final vol of 40mls with DI water
Refluxed until sample is fully into solution.

Prep person:	Laura LaFrance
Client:	Ecorp 9/21
Date/Time:	10/8/2001 12:00
page	1 of 1

#	Client	Sample ID	Wt sample (g)	Notes
1		PBT1	_____	
2		PBT2	_____	
3		PBT3	_____	
4		PBT4	_____	
5		Dolt-2	0.247	
6		Dorm-2	0.246	
7		Blank Spike	_____	(A)
8		ML Spike	_____	(ML)
9		L3739-10	0.491	
10		L3739-11	0.507	
11		MD	0.506	
12		MS	0.500	(B)
13		MSD	0.502	(B)
14		L3739-12	0.508	
15		L3739-13	0.501	
16		L3739-14	0.501	
17		L3739-15	0.504	
18		L3739-16	0.508	
19		L3739-17	0.499	
20		L3739-19 10/8/01		
21				
22				
23				
24				
25				

Spikes	Element	ul Standard used	conc Std	TM#
(A)	Ag	40	10X	TM4-44-3
(B)	Ag	100	10X	
(ML)	MLB	500		TM4-50-7

SPIKES WITNESSED 10/8/01 gmc

Quantitative Analysis Calibration Report

File Name: 011010-1.cal
 File Path: C:\elandata\System.
 Calibration Type: External Calibration

Analyte	Mass	Curve Type	Slope	Corr. Coeff.
Be	9	Linear Thru Zero	0.00024	0.999932
Na	23	Linear Thru Zero	0.00381	0.999977
Mg	24	Linear Thru Zero	0.00267	0.999890
Al	27	Linear Thru Zero	0.00369	0.999996
K	39	Linear Thru Zero	0.00515	0.999966
Ca	44	Linear Thru Zero	0.00016	0.999885
Sc	45	Linear Thru Zero	0.00000	0.000000
Cr	52	Linear Thru Zero	0.00587	0.999856
Cr	53	Linear Thru Zero	0.00071	0.999868
Ni	60	Linear Thru Zero	0.00157	0.999964
Ni	62	Linear Thru Zero	0.00024	0.999960
Cu	65	Linear Thru Zero	0.00170	0.999954
Cu	63	Linear Thru Zero	0.00358	0.999960
Zn	66	Linear Thru Zero	0.00043	0.999951
Zn-1	68	Linear Thru Zero	0.00030	0.999906
Zn	68	Linear Thru Zero	0.00030	0.999906
As-1	75	Linear Thru Zero	0.00049	0.999900
As	75	Linear Thru Zero	0.00050	0.999891
Se	77	Linear Thru Zero	0.00004	0.999872
Se	82	Linear Thru Zero	0.00005	0.999899
Ag	107	Linear Thru Zero	0.00232	0.999942
Ag	109	Linear Thru Zero	0.00221	0.999918
Cd	111	Linear Thru Zero	0.00061	0.999881
Cd-1	114	Linear Thru Zero	0.00142	0.999899
Cd	114	Linear Thru Zero	0.00140	0.999888
In	115	Linear Thru Zero	0.00000	0.000000
Sb	121	Linear Thru Zero	0.00200	0.999828
Sb	123	Linear Thru Zero	0.00153	0.999869
Pt	195	Linear Thru Zero	0.00000	0.000000
Tl	205	Linear Thru Zero	0.02911	0.999914
Pb	208	Linear Thru Zero	0.04106	0.999962
C	13	Linear Thru Zero	0.00000	0.000000
N	14	Linear Thru Zero	0.00000	0.000000
P	31	Linear Thru Zero	0.00000	0.000000
S	34	Linear Thru Zero	0.00000	0.000000
Cl	35	Linear Thru Zero	0.00000	0.000000
Br	81	Linear Thru Zero	0.00000	0.000000
Kr	83	Linear Thru Zero	0.00000	0.000000
Te	125	Linear Thru Zero	0.00000	0.000000
Ba	136	Linear Thru Zero	0.00000	0.000000