Onondaga County Health Department Division of Environmental Health 421 Montgomery Street Syracuse, New York 13202

Incinerator Monitoring Program

2013 Ash Characterization Summary

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I. Table of Abbreviations

The following abbreviations may be used throughout this report:

As	Arsenic.
Be	Beryllium.
Cd	Cadmium.
CES	Certified Environmental Services.
Cr	Chromium.
CV	Coefficient of Variation.
ELAP	Environmental Laboratory Approval Program.
ELS	Environmental Laboratory Services.
Hg	Mercury.
LD	Limit of Detection.
Ni	Nickel.
NYSDEC	New York State Department of Environmental Conservation.
OCHD	Onondaga County Health Department.
Pb	Lead.
ppm	parts per million.
ug/g	micrograms per gram (= ppm).
SD	Standard Deviation.
Se	Selenium.
V	Vanadium.
WTE	Waste To Energy Facility.
Zn	Zinc.
~	approximately.
<	Less than.
>	Greater than.
NA	Not applicable.

Note: Values <LD were not included in average, SD and CV calculations.

II. Executive Summary

Sample analyses for the 2013 ash characterization study were conducted by Life Science's Laboratories, Inc. (formerly O'Brien and Gere Laboratories, Inc.). As has been the format since the Fall 1998 reporting period, the year 2013 results have been reported on both a wet weight and dry weight basis. Results through the Spring 1998 reporting period were reported exclusively on a wet weight basis. Each of these reported values provides important information regarding ash metal data. Wet weight values will be used for historical comparison relative to the conditions of the ash as it leaves the WTE Facility. Dry weight values will allow for better comparison with future metal concentrations, removing the variability of ash moisture content. Dry weight values will tend to be higher than wet weight since the weight of the "inert" water is removed in the concentration calculations.

This report uses the individual metal "mean plus three standard deviations" as a benchmark for consistent results. Calculations include all wet weight data through the Fall 2013 sampling period. This standard is supported by the NYSDEC data in which at least 95% of the individual metal results are within the "mean plus three standard deviations" for the respective metals. It is evident by looking at the data from this report and the NYSDEC data that there will be occasional results outside of this benchmark. Occasional outlying sample results are not considered to be of significance. Such results may be due to the fact that, while every effort is used to create a homogeneous combined ash sample, it is not feasible to obtain such a sample because of the presence of incombustible "chunks" in the bottom ash.

Ash collection and compositing continues to be the responsibility of Covanta Energies Systems of Onondaga under NYSDEC protocols. The Health Department and Covanta Energies utilize split samples to ensure the most accurate results.

III. Introduction

The purpose of this study is to provide part of an ongoing evaluation of ash generated at the Onondaga County Resource Recovery Agency Waste-To-Energy facility. The results summarized in this report reflect analysis of combined fly and bottom ash samples from Fall 1995 through Fall 2013. The ash samples were analyzed for total metal concentration for arsenic, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, vanadium and zinc.

In 2011, due to improvements in laboratory equipment, the detection limits for beryllium, cadmium, and selenium have been lowered. Therefore there are detectable levels of these metals in many of the ash samples starting in 2011 as compared to previous years.

As part of our evaluation of the metals content of the ash samples, the average value concentrations from each semiannual sampling period are compared to the analogous values from the combined ash samples from the NYSDEC "Ash Residue Characterization Project" (1992). Average and standard deviation calculations do not include those results less than a limit of detection.

The results in this report represent total metal content in the combined fly and bottom ash from the WTE Facility. The standard test for determining the leachability of constituents of combined ash is the TCLP protocol established by the USEPA and accepted by the NYSDEC. Total metal content is not necessarily indicative of the leachability of contaminants from the ash.

IV. Element Specific Summary

Arsenic

Ash sample values in the 2013 study varied from 24.0 ppm wet weight (32.0 ppm dry wt) to a high value of 77.0 ppm wet weight (98.0 ppm dry wt). There were no arsenic results above the mean + 3SD level of 86 ppm wet weight.

The distribution and average for arsenic during the 2013 sampling period is consistent with the NYSDEC mean arsenic value of 19.1 ppm.

Beryllium

Ash sample values in the 2013 study varied from 0.33 ppm wet weight (0.45 ppm dry wt) to a high value of 0.55 ppm wet weight (0.7 ppm dry wt). One ash sample had a beryllium value above the mean + 3SD level of 0.64 ppm wet weight.

Beryllium was not evaluated in the DEC study.

Cadmium

Ash sample values in the 2013 study varied from 29.0 ppm wet weight (40.0 ppm dry wt) to a high value of 54.0 ppm wet weight (68.0 ppm dry wt). There were no cadmium results above the mean + 3SD level of 63.3 ppm wet weight.

The distribution and average for cadmium during the 2013 sampling period is consistent with the NYSDEC mean cadmium value of 33.6 ppm.

Chromium

Ash sample values in the 2013 study varied from 48.0 ppm wet weight (59.0 ppm dry wt) to a high value of 130.0 ppm wet weight (160.0 ppm dry wt). One ash sample had a chromium value above the mean + 3SD level of 122.5 ppm wet weight.

The distribution and average for chromium during the 2013 sampling period is very consistent with the NYSDEC mean chromium value of 259 ppm. The DEC average value of 259 ppm is skewed by a single outlying sample result.

Lead

Ash sample values in the 2013 study varied from 430 ppm wet weight (560 ppm dry wt) to a high value of 1,400 ppm wet weight (1,700 ppm dry wt). There were no lead results above the mean + 3SD level of 1651 ppm wet weight.

The distribution and average for lead during the 2013 sampling period is consistent with the NYSDEC mean lead value of 1,558 ppm.

Mercury

Ash sample values in the 2013 study varied from 1.8 ppm wet weight (2.3 ppm dry wt) to a high value of 6.5 ppm wet weight (9.0 ppm dry wt). There were no mercury results above the mean + 3SD level of 6.7 ppm wet weight.

The distribution and average for mercury during the 2013 sampling period is very consistent with the NYSDEC mean mercury value of 10.9 ppm.

Nickel

Ash sample values in the 2013 study varied from 24.0 ppm wet weight (30.0 ppm dry wt) to a high value of 301.0 ppm wet weight (390.0 ppm dry wt). There was one nickel result above the mean + 3SD level of 300 ppm wet weight.

The distribution and average for nickel during the 2013 sampling period is significantly lower than the NYSDEC mean nickel value of 658 ppm.

Selenium

Ash sample values in the 2013 study varied from 0.5 ppm wet weight (0.6 ppm dry wt) to a high value of 1.5 ppm wet weight (1.9 ppm dry wt). There were no selenium results above the mean + 3SD level of 1.9 ppm wet weight.

The distribution and average for selenium during the 2013 sampling period is very consistent with the NYSDEC mean selenium value of 2.66 ppm.

Vanadium

Ash sample values in the 2013 study varied from 23.0 ppm wet weight (31.0 ppm dry wt) to a high value of 39.0 ppm wet weight (51.0 ppm dry wt). There were no vanadium results above the mean + 3SD level of 42.7 ppm wet weight.

Vanadium was not evaluated in the DEC study.

Zinc

Ash sample values in the 2013 study varied from 2,900 ppm wet weight (3,800 ppm dry wt) to a high value of 4,700 ppm wet weight (6,100 ppm dry wt). One ash sample had a zinc value above the mean + 3SD level of 5,455 ppm wet weight.

The distribution and average for zinc during the 2013 sampling period is consistent with the NYSDEC mean zinc value of 3,666 ppm.

V. Summary and Conclusions

The data contained in this report indicates consistent levels for all metals in the combined ash residue throughout the first nineteen years of operation. The samples from the Fall 1995 to Fall 2013 sampling periods are also consistent with those of the NYSDEC "Ash Residue Characterization Project".

The Health Department recognizes that there are inherent difficulties in using the NYSDEC study for comparison. The DEC study uses several different ash producing sources for their data. Also, the data is from a very specific time period. It does not take into account changes in the municipal solid waste stream due to time of year, increased recycling efforts, etc. However, results from the Health Department's study have shown that these variables have little significant effect on the total metal concentration in the ash. This is apparent when looking at the individual results and the sampling period averages over time. Well over 95% of the individual results from the ash characterization studies to date are within the "mean plus three standard deviation" criteria. Additionally, average metal values for each of the sampling periods show little relative change throughout the time frame of this report.

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
11/15 - 16/95	951158	18.7	<.1	42.3	49.2	1189	5.87	44.8	2.09	10.02	3771
11/16 - 17/95	951159	18.7	0.13	36.7	42.2	866	4.26	50.3	1.69	10.02	3200
11/17/95	<u>951160</u>	16.8	0.15	37.7	41.1	1095	3.27	43.9	1.88	9.72	3593
11/17/95	951161	14.1	<.1	45.0	51.0	1164	5.19	38.3	1.85	9.7 <u>2</u> 9.74	<u> </u>
11/17 - 18/95	951162	12.5	<.1	30.7	58.7	1067	3.94	42.5	1.83	10.06	8225
11/18/95	951163	11.9	0.12	54.3	41.2	1174	3.61	54.3	2.16	9.74	3120
11/18/95	951164	7.8	<.1	39.4	48.1	1080	4.97	<u> </u>	2.10	<u>9.74</u> 9.42	
11/18 - 19/95	951165	18.8	<.1	44.1	38.8	1236	5.34	73.6	1.76		3709
11/19/95	951166	19.3	<.1	42.7	51.1	1307	4.38	65.2	2.04	8.52 9.96	4070
11/19/95	951167	14.6	0.20	29.1	39.7	1036	3.40	63.0	1.55	10.60	<u>4577</u> 4517
									1.00	10,00	
		15.3	0.15	40.2	46.1	1121	4.42	52.7	1.90	9.88	4277
COEFFICIENT OF		3.6	0.03	6.9	6.2	116	0.84	10.8	0.19	0.62	1393
	VARIATION	23.7%	20.5%	17.3%	13.4%	10.4%	19.1%	20.4%	10.1%	6.3%	32.6%

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Analyses performed by OCHD.

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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Bervillium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn
03/08 - 19/1996	960129	22.0	0.150	33.9	32.7	897	4.83	24.7	2.25	8.21	
03/08 - 19/1996	960130	13.6	0.160	41.3	33.3	894	7.82	27.7	2.73	8.84	2031
03/08 - 19/1996	960131	10.9	0.220	34.9	30.0	1127	6.70	37.7	1.97	9.87	2038
03/08 - 19/1996	960132	10.0	<.100	26.6	25.2	543	4.73	16.2	1.76	8.63	2191
03/08 - 19/1996	960133	11.8	0.320	20.1	52.0	478	5.13	35.5	1.76	9.70	1821
03/08 - 19/1996	960134	5.6	<.100	29.8	27.0	1022	5.23	25.6	1.97	7.02	1101
03/08 - 19/1996	960135	10.5	<.100	31.0	31.6	910	5.04	<u> </u>	2.51		2135
03/08 - 19/1996	960136	13.3	<.100	22.4	29.1	622	5.20	32.5	1.94	7.54	2010
03/08 - 19/1996	960137	14.0	0.210	21.0	26.2	616	4,44	18.4	2.33	6.81	1448
03/08 - 19/1996	960138	19.6	<.100	24.0	24,5	1062	4.69	22.8	2.35	<u>15.6</u> 8.09	1230
						1001	<u> </u>	22.0	<u> </u>	0.09	1724
AVERAGE STANDARD DEV		13.1	0.21	28.5	31.1	817	5.38	29.8	2.17	9.04	1773
COEFFICIENT OF		4.5	0.11	6.6	7.5	221	1.00	11.3	0.32	2.40	368
		34.3%	53.9%	23.0%	24.2%	27.0%	18.6%	37.9%	14.6%	26.6%	20.8%

Analyses performed by OCHD.

			The second s							
960667	33.1	<.100	46,3	50.8	2028	3.16	59.0	2 45	12.1	4900
960668	25.9	<.100		43.1						4802
960669	29.9	<.100	1	T		1		1		4507
960670			·			· · · · · · · · · · · · · · · · · · ·	1	T	T	3883
960671					1	1				2290
960672						1 ·····	· · · · · · · · · · · · · · · · · · ·	1		4552
									12.9	4481
······			<u></u>					2.84	15.9	3803
					<u> </u>		47.3	2.53	15.7	8196
				· · · · · · · · · · · · · · · · · · ·	1	6.83	53.7	3.05	17.7	6757
				<u>66.9</u>	731	4.41	55.4	1.90	15.7	4732
		····		44.4	751	6.38	69.8	1.35	10.6	2904
		<.100	38.2	50.8	1110	5.90	40.9	2.02	11.8	3278
	37.2	<.100	38.2	87.0	1320	5.50	54.2			11168
960680	30.8	<u><.100</u>	33.0	57.9	697	4.33				
	00.0								11.9	3666
ATION		the second s	······································		1256	6.07	77.5	2.33	15.0	4930
VARIATION	the second s					2.62	85.1	0.41	3.0	2256
			10.270	100.5%	32.5%	43.1%	<u>109.8%</u>	17.8%	19.8%	45.8%
	960668 960669 960670 960671 960672 960673 960674 960675 960676 960677 960678 960679 960680	960668 25.9 960669 29.9 960670 32.3 960671 30.5 960672 25.4 960673 30.4 960674 35.5 960675 31.0 960676 20.0 960677 25.7 960678 30.5 960679 37.2 960680 30.8	960668 25.9 <.100 960669 29.9 <.100	960668 25.9 <.100 49.7 960669 29.9 <.100	960668 25.9 <.100 49.7 43.1 960669 29.9 <.100	960668 25.9 <.100 49.7 43.1 1604 960669 29.9 <.100	960668 25.9 <.100 49.7 43.1 1604 13.8 960669 29.9 <.100	960668 25.9 <.100 49.7 43.1 1604 13.8 39.2 960669 29.9 <.100	960668 25.9 <.100 49.7 43.1 1604 13.8 39.0 2.45 960668 29.9 <.100	960668 25.9 <.100 49.7 43.1 1604 13.8 39.2 2.18 14.5 960669 29.9 <.100

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Analyses performed by OCHD.

SAMPLE COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic			Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	
03/10/97	970134	22.9	0.110	49.6	35.7	660	8.24	30.7	1.85	17.7	4322
03/10/97	970135	17.5	<.100	29.0	30.2	622	5.66	30.3	1.60	14.8	4220
03/11/97	970136	14.2	0.600	24.0	41.1	828	6.55	38.5	1.18	14.9	4308
03/11/97	970137	12.9	0.170	30.3	36.3	717	6.28	35.4	1.28	11.9	2450
03/12/97	970138	15.0	0.160	33,9	41.4	841	9.45	30.3	1.50	12,4	3658
03/12/97	970139	12.2	<.100	48.2	74.4	1009	5.15	60.9	1.23	96.4	1943
03/13/97	970140	16.3	<.100	29.0	44.2	502	5.81	37.1	1.60	13.3	3563
03/13/97	970141	14.1	<.100	28.5	42.4	682	7.34	31.1	1.04	10.0	2906
03/14/97	970142	14.2	0.110	29.8	46.9	668	4.16	36.3	1.55	12.2	3377
03/14/97	970143	12.5	<.100	28.1	59.8	530	8.19	58.4	0.88	16.4	3648
03/15/97	<u>9701</u> 44	17.7	<.100	32.9	60.7	684	7.73	60.7	1.37	15.0	3832
03/15/97	970145	16.5	0.140	26.0	56.0	629	5.4	56.0	0.75	16.0	7786
03/16/97	970146	14.9	<.100	20.4	41.3	495	7.14	49.5	1.70	9.8	5291
03/16/97	970147	11.5	<.100	35.8	64.5	1047	6.54	64.5	0.67	14.6	
							0.01	01.0	0.07	14.0	<u>557</u> 6
AVERAGE STANDARD DEVI	ATION	15.2	0.22	31.8	48.2	708	6.69	44.3	1.30	19.7	4063
COEFFICIENT OF		2.8 18.7%	0.16	7.9	12.3	164	1.37	12.8	0.35	21.4	1398
		10.770	72.4%	24.9%	25.5%	23.1%	20.5%	28.9%	26.9%	108.8%	34.4%
Analyses performed by	OCHD.										
09/15/97	970698	43.3	<.100	34.1	54.9	3932	5.84	42.2	1.20	21.2	4982
09/15/97	970699	21,7	<.100	33.4	45.5	923	4.40	26.7	0.64	12.5	3820
09/16/97	970700	32.5	0.290	30.2	53.2	1012	3.61	32.5	0.92	20.7	
09/16/97	970701	22.9	<.100	26.2	37.3	1023	5.18	19.4	0.67		4634
09/17/97	970702	40.5	<.100	31.8	44.1	968	5.72	28.1	0.86	16.3	3834
09/17/97	970703	22.1	<.100	33,4	40.4	1051	4.91			17.8	4583
09/18/97	970704	22.2	<.100	27.1	69.5	1014	5.33	36.8	0.61	10.5	4584
09/18/97	970705	24.5	<.100	21.8	34.7	1014		32.9	0.86	17.5	3617
09/19/97	970706	25.3	<.100	32.6	46.7		12.5	14.7	0.82	11.8	3296
09/19/97	970707	22.2	0.140	30.4		1911	7.91	33.6	0.72	14.8	4041
			0.140	30.4	60.2	1481	6.75	28.7	0.60	13.0	4152
AVERAGE		27.7	0.22	30.1	48.7	1440	6.21	29.6	0.70	4	
STANDARD DEVI	ATION	7.7	0.09	3.7	10.2	880	2.38	7.6	0.79	15.6	4154
COEFFICIENT OF	VARIATION	27.8%	42.9%	12.4%	21.1%	61.1%	38.2%	25.8%	22.2%	3.5 22.5%	<u> 504</u> 12.1%
nalyses performed by	OCHD.									<u>~~.</u> /0	12,170

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
02/23/98	980126	14.8	<0.50	26.6	41.3	700	11.6	95.0	<0.25	25.0	3100
02/23/98	980127	16.6	<0.50	30.1	36.9	1760	6.50	75.8	<0.25	15.6	9140
02/24/98	980128	12.6	< 0.50	24.2	28.4	740	7.70	23.8	<0.25	13.4	2820
02/24/98	980129	9.60	<0.50	23.0	35.8	610	9.30	23.8	<0.25	16.8	2610
02/25/98	980130	7.60	<0.50	23.8	44.2	510	5.30	46.7	<0.25	17.2	2520
02/25/98	980131	6.70	<0.50	21.6	32.5	540	9.70	26.2	<0.25	13.4	3050
02/26/98	980132	12.4	<0.50	24.8	68.2	730	10.0	42.7	<0.25	22.4	3350
02/26/98	980133	6.60	< 0.50	19.7	44.2	580	5.44	47.0	<0.25	12.1	2210
02/27/98	980134	7.60	<0.50	27.4	39.4	460	2.93	46.4	<0.25	13.8	2220
02/27/98	980135	7.40	<0.50	21.4	41.2	7200	10.5	35.8	<0.25	12.6	2310
02/27/98**	980135-RPT					761					
VEDAGE											_
VERAGE		10.2	N/A	24.3	41.2	1383	7.90	46.3	N/A	16.2	3333
TANDARD DEV		3.5	N/A	3.0	10.2	1971	2.64	21.9	N/A	4.1	1971
OEFFICIENT O	F VARIATION	34%	N/A	12%	25%	143%	33%	47%	N/A	25%	59%

Analyses performed by CES.

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
10/26/98	980808	29.8	0.80	26.6	47.7	852	6.95	49.9	<0.99		
10/26/98	980809	23.6	0.52	26.4	47.1	776	6.40	41.6		33.0	3558
10/27/98	980810	36.0	0.74	28.0	138.6	1417	6.90		<1.00	31.6	3926
10/27/98	980811	25.3	0.66	31.9	49.3	14800		199.4	<2.47	36.2	3565
10/28/98	980812	32.9	0.65	30.6	49.3		6.88	40.2	<0.98	26.3	4024
10/28/98	980813	22.8	0.44			1525	8.01	32.7	<0.98	30.7	3311
10/29/98	980814	37.8		29.1	52.4	1184	7.18	61.3	<0.96	30.1	3604
10/29/98	980815		0.64	33.2	62.5	996	9.20	54.0	<1.00	32.0	1429
10/30/98	980816	31.1	0.69	30.4	44.9	2633	14.0	17.0	<0.98	26.3	3788
10/30/98		29.8	0.52	22.8	37.1	740	7.32	41.1	<2.51	41.6	3110
10/30/96	980817	30.6	0.51	22.1	34.6	1100	6.14	58.0	<1.00	27.4	3892
VERAGE		30.0	0.00	00.4							
TANDARD DEVI	ATION	4.7	0.62	28.1	55.7	2602	7.90	59.5	N/A	31.5	3421
OEFFICIENT OF	VARIATION	16%	0.11	3.5	<u>28.6</u> 51%	4100	2.20	48.2	N/A	4.5	716
				12/0	51%	158%	28%	81%	N/A	14%	21%

Analyses performed by ELS.

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DATE 04-19-99 04-19-99 04-20-99 04-20-99 04-21-99 04-21-99 04-21-99 04-22-99 04-22-99 04-22-99 04-23-99 04-23-99	# 990215 990216 990217 990218 990219 990220 990221 990222	Arsenic 30.4 22.7 26.0 20.8 28.6 29.6 24.1	Beryllium <0.50 <0.50 <0.50 <0.49 <0.50	29.4 32.8 29.3 34.2	Chromium 50.1 114 47.0	760 1860	Mercury 4.56 3.83	Nickel 73.0 33.9	1.28	Vanadium 30.9	<u>Zinc</u> 2864
04-19-99 04-20-99 04-20-99 04-21-99 04-21-99 04-22-99 04-22-99 04-23-99	990216 990217 990218 990219 990220 990221	22.7 26.0 20.8 28.6 29.6	<0.50 <0.50 <0.49 <0.50	32.8 29.3 34.2	<u>114</u> 47.0	1860	1			30.9	2864
04-20-99 04-20-99 04-21-99 04-21-99 04-22-99 04-22-99 04-23-99	990217 990218 990219 990220 990221	26.0 20.8 28.6 29.6	<0.50 <0.49 <0.50	29.3 34.2	47.0		3.83	33.0	ا مدد ا		
04-20-99 04-21-99 04-21-99 04-22-99 04-22-99 04-22-99 04-23-99	990218 990219 990220 990221	20.8 28.6 29.6	<0.49 _<0.50	34.2				00.0	1.16	36.5	9523
04-21-99 04-21-99 04-22-99 04-22-99 04-23-99	990219 990220 990221	28.6 29.6	<0.50			728	3.83	62.1	1.28	32.3	2730
04-21-99 04-22-99 04-22-99 04-23-99	990220 990221	29.6			49.0	652	5.60	31.8	1.36	20.0	2920
04-22-99 04-22-99 04-23-99	990221		-0 A0	36.2	51.4	885	5.77	1509	1.50	27.7	3863
04-22-99 04-23-99		24.1	<0.49	44.2	227	828	5.24	44.0	1.75	32.3	3808
04-23-99	990222		<0.49	35.3	44.5	1029	4.13	39.0	0.89	31.5	2916
		26.8	<0.49	38.9	58.0	1123	5.04	30.7	1.15	23.6	3362
04-23-99	990223	30.2	<0.50	40.2	51.6	848	4.80	29.3	1.68	30.0	3360
and the second se	990224	23.9	<0.49	33.6	53.1	939	5.54	43.0	1.31	23.4	3303
			_						1.01	20.4	3303
	0.1	26.3	N/A	35.4	74.6	965	4.83	190	1.34	28.8	3865
STANDARD DEVIATIO		3.2	N/A	4.4	54.4	327	0.69	440	0.24	4.8	1922
OCENTIONENT OF VA	MATION	12.2%	N/A	12.6%	72.9%	33.8%	14.3%	232.1%	18.2%	16.7%	49.7%
Analyses performed by ELS	990747	29.6	<2.53	20.0	00.4	700					
	990748	30.9		29.9	60.1	789	5.73	241	<u> <2.53 </u>	37.0	3176
	990749		<2.56	30.2	48.6	802	5.47	268	3.48	30.6	3302
		33.1	<2.43	31.5	53.4	1026	4.70	64.7	<2.43	48.6	3139
	<u>990750</u>	24.0	<2.45	32.1	60.1	698	5.44	48.9	<2.45	34.6	2923
	990751	25.2	<2.48	30.5	64.2	848	<u>4.51</u>	60.0	<2.48	40.4	3308
	990752	25.8	<2.48	36.2	51.8	1425	5.30	43.7	<2.48	27.0	3383
	<u>990753</u>	28.2	<2.42	31.2	45.7	928	5.12	38.1	<2.42	48.0	3042
	990754	24.4	<2.41	33.3	49.3	876	7.45	43.1	<2.41	30.1	3416
	990755	23.5	<2.45	27.5	50.0	700	6.22	39.5	<2.45		
11-12-99	990756	25.4	<2.43	38.8	42.4	920	6.85	171	<2.43	28.9	2743
VERAGE				يا جي پيد همي بختنان ه			0.00		~2.43	24.8	3815
TANDARD DEVIATIO		27.0	N/A	32.1	52.6	901	5.68	102	3.48	35.0	2005
OEFFICIENT OF VAL		3.1	N/A	3.1	6.6	200	0.88	85	0.00	8.0	<u>3225</u> 281
CE VAL	NATION	11.5%	N/A	9.7%	12.5%	22.2%	15.4%	83.7%	0.00	0.0	781

SAMPLE						_					
COLLECTION	LAB	As	Be	Cd	Cr	РЬ	Hg	Ni	Se	V	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium		Mercury	Nickel	-	Vanadium	Zinc
05/08/00	2000-0243	38.8	<0.49	35.5	58.8	1053.0	7.0	101.4	1.2	32.9	3120.0
05/08/00	2000-0244	28.6	<0.50	34.9	63.8	708.1	5.4	58.2	1.2	25.1	3385.2
05/09/00	2000-0245	73.4	<0.50	38.6	65.9	1112.0	8.6	247.2	2.6	24.9	5576.0
05/09/00	2000-0246	25.2	<0.50	31.4	92.8	761.3	6.2	117.8	0.9	23.1	3681.6
05/10/00	2000-0247	30.7	<0.25	33.5	55.9	693.8	6.1	39.8	0.9	23.4	5844.3
05/10/00	2000-0248	26.3	<0.50	34:5	61.4	792.0	6.6	47.2	1.1	22.8	2944.0
05/11/00	2000-0249	53.8	<0.50	39.5	106.1	721.7	10.4	290.0	1.5	31.9	3078.0
05/11/00	2000-0250	33.9	<0.50	32.4	51.6	850.2	5.7	29.6	<0.50	30.9	<u> </u>
05/12/00	2000-0251	25.5	<0.49	28.7	55.5	673.9	7.6	282.0	1.3	26.4	3649.8
05/12/00	2000-0252	35.1	<0.50	38.7	67.4	757.5	6.8	42.3	1.4	26.0	3157.5
								72.0	1.7	20.0	3137.3
AVERAGE		37.1	NA	34.8	67.9	812	7.02	126	1.23	26.7	3839
STANDARD DEV		14.6	NA	3.3	16.7	144	1.42	101	0.62	3.6	984
COEFFICIENT O	F VARIATION	39.2%	NA	9.5%	24.6%	17.7%	20.2%	80.1%	50.5%	13.4%	25.6%
Analyses performed b											
12/10/00	2000-0785	27.8	<0.51	28.1	42.2	1014.0	9.4	32.8	1.1	44.5	3127.8
12/11/00	2000-0786	15.8	<0.49	18.7	39.1	669.1	5.4	29.3	1.0	22.5	1903.5
12/11/00	2000-0787	23.1	<0.49	26.3	49.0	732.6	3.8	44.4	1.3	36.6	2656.6
12/12/00	2000-0788	21.1	<0.50	31.2	46.1	628.5	4.9	38.0	1.2	26.4	2956.5
12/12/00	2000-0789	14.3	<0.50	27.2	69.5	810.0	4.4	314.3	1.4	20.2	3630.0
12/13/00	2000-0790	14.9	<0.50	26.6	50.3	858.4	5.6	47.8	1.3	28.4	2634.4
12/13/00	2000-0791	14.5	<0.50	26.7	51.5	694.1	6.1	28.2	1.2	17.9	2190.4
12/14/00	2000-0792	21.1	<0.50	24.0	53.0	858.4	5.5	47.5	1.3	26.1	
12/14/00	2000-0793	19.1	<0.51	27.5	41.4	976.8	5.0	54.4	<u>1.5</u>		2205.2
12/15/00	2000-0794	21.0	<0.51	21.1	36.1	7528.0	4.3	26.1		22.4	3414.4
						1020.0	4.0	20.1	1.3	20.7	2160.0
AVERAGE		<u>19.3</u>	NA	25.7	47.8	1477	5.44	66.3	1.26	26.6	0000
STANDARD DEVI	ATION	4.2	NA	3.4	9.0	2021	1.47	83.2	0.16	7.8	2688
COEFFICIENT OF	VARIATION	21.7%	NA	13.2%	18.8%	136.8%	27.0%	125.5%	12.6%	<u>7.8</u> 29.4%	553
nalvses performed by	—									23,470	20.6%

SAMPLE						·					
	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic	Beryllium		Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
03/19/01	01-0167	8.2	0.24	20.6	40.7	627.8	2.3	36.6	0.6	18.6	1941.8
03/19/01	01-0168	6.0	0.35	14.5	48.7	777.6	2.1	21.1	0.7	16.6	1764.0
03/20/01	01-0169	9.2	0.21	20.2	36.6	609.8	3.8	23.5	1.2	15.2	1672.5
03/20/01	01-0170	11.2	0.22	17.3	38.6	427.4	2.0	34.6	1.1	15.1	1686.3
03/21/01	01-0171	9.0	<0.10	17.7	25.9	352.7	3.2	24.8	1.0	11.8	1601.6
03/21/01	01-0172	7.7	0.25	19.6	33.6	419.0	4.1	26.8	1.2	19.7	4737.7
03/22/01	01-0173	10.9	0.24	29.0	61.5	522.2	3.3	67.2	0.8	22.0	1981.0
03/22/01	01-0174	6.7	0.30	18.0	36.5	413.9	3.8	51.5	1.0	21.8	1701.0
03/23/01	01-0175	8.6	<0.10	13.7	28.9	674.3	2.9	36.0	2.6	21.4	2010.0
03/23/01	01-0176	8.4	0.20	24.3	28.9	549.8	3.3	44.7	1.0	14.6	1990.6
									L	14.0	1000.0
AVERAGE STANDARD DEV		8.6	0.201	19.5	38.0	537.4	3.1	36.7	1.1	17.7	2108.7
COEFFICIENT O		1.5	0.1	4.3	10.0	128.7	0.7	13.7	0.5	3.4	888.3
OOLI HOILINI O		18.0%	19.1%	22.0%	26.4%	24.0%	23.2%	37.4%	47.2%	19.0%	42.1%
Analyses performed b	w FLS										
	, LLO.										
12/10/01	01-0777	35.3	<0.5005	44.9	33.0	2895.2	5.9	40.0	2.0	00.0	0767.0
12/10/01	01-0778	18.5	<0.4928	25.9	30.5	517.4	6.0	40.0 21.3	2.9	29.0	3757.6
12/11/01	01-0779	20.7	<0.4968	42.5	45.6	864.0			1.5	24,8	2610.3
12/11/01	01-0780	21.8	<1.28	33.9	48.0		6.7	35.6	2.0	22.3	3340.8
12/12/01	01-0781	19.8	<0.5106	27.6		755.2	4.9	38.6	2.3	22.8	4032.0
12/12/01	01-0782	24.9	<0.5022		39.9	<u> </u>	4.1	48.0	2.7	30.9	2812.0
12/13/01	01-0783	24.9		37.9	33.9	781.7	6.2	35.2	3.2	23.3	3677.4
12/13/01	01-0784		<0.504	40.5	30.7	652.0	5.3	32.6	2.2	26.8	3112.0
12/14/01		24.1	<0.5175	35.0	33.7	1305.0	2.1	40.0	2.2	21.1	2925.0
12/14/01	01-0785	33.8	<0.5041	73.8	35.4	1178.6	1.9	27.3	2.9	. 28.7	3968.9
12/14/01		107		044	101	4000.4	1.3	<u> </u>			
	01-0786	13.7	<0.4964	24.1	43.4	1080.4	1.3	32.3	1.6	39.3	2233.8
AVERAGE										39.3	2233.8
AVERAGE STANDARD DEVI	IATION	23.8	NA	38.6	37.4	1062.1	4.4	35.1	2.4	26.9	2233.8 3247.0
	IATION										

Analyses performed by ELS.

SAMPLE			1						1	\$	
COLLECTION	LAB	As	Be	Cd	Сг	Pb					_
DATE	#	Arsenic	Beryllium		Chromium	Lead	Hg Mercury	Ni Nickel	Selenium	V Vanadium	Zn
05/06/02	02-0241	23.9	<0.4836	29.3	48.7	710.6	4.5	71.3	1.4		
05/06/02	02-0242	19.7	<0.4928	22.3	44.3	563.6	2.2		1	30.3	2581.8
05/07/02	02-0243	38.8	<0.5002	42.6	<u>45.6</u>	768.3	F	61.2	1.2	24.1	2795.1
05/07/02	02-0244	22.8	<0.5124	41.7	45.6 95.8		4.5	38.8	1.6	24.0	3526.0
05/08/02	02-0245	22.2	<0.5025	43.0	<u>95.8</u> 59.3	<u>646.0</u> 900.0	6.8	55.7	1.2	27.6	3368.4
05/08/02	02-0246	18.6	<0.5135	24.1			5.8	52.7	1.5	28.5	3825.0
05/09/02	02-0247	29.2	<0.4977		52.8	659.7	1.9	60.8	0.6	24.2	2449.0
05/09/02	02-0248			26.9	55.9	770.3	3.4	29.8	0.9	23.9	2180.4
05/10/02	02-0248	18.6	<0.4898	18.7	36.7	593.3	2.3	28.1	0.9	18.5	2061.9
05/10/02	02-0249	34.1	<0.4940	32.2	41.9	693.1	5.7	26.8	1.8	23.8	2781.6
00/10/02	02-0250	43.6	<0.5092	45.5	55.6	731.1	5.2	29.9	1.9	24.5	3792.4
				20.0	53.6	703.6	4.2	45.5			
VERAGE		27.2	ι ΝΔ ι							2/0 1	2936.2
		<u>27.2</u> 8.5	NA NA	32.6 9.3	and the second se		the second s	45.5	1.3	24.9	
AVERAGE STANDARD DEV COEFFICIENT OF malyses performed by	VARIATION	27.2 8.5 31.1%	NA NA NA	9.3 28.6%	15.5 29.0%	92.3 13.1%	1.6 38.5%	45.5 15.8 34.7%	0.4 30.7%	3.1 12.3%	616.5
STANDARD DEV COEFFICIENT OF malyses performed by	VARIATION	8.5 31.1%	NA NA	9.3 28.6%	15.5 29.0%	92.3 13.1%	1.6 38.5%	15.8 34.7%	0.4 30.7%	3.1 12.3%	
STANDARD DEV COEFFICIENT OF malyses performed by 12/02/02	VARIATION (ELS. 02-0767	8.5 31.1% 33.5	NA NA <1.005	9.3 28.6% 43.2	15.5 29.0% 45.7	92.3 13.1% 982.5	1.6 38.5% 4.5	<u>15.8</u> 34.7% 42.6	0.4 30.7% 1.8	3.1	616.5
STANDARD DEV COEFFICIENT OF nalyses performed by 12/02/02 12/02/02	VARIATION ELS. 02-0767 02-0768	8.5 31.1% 33.5 16.6	NA NA <1.005 <1.0184	9.3 28.6% 43.2 24.6	15.5 29.0% 45.7 35.6	92.3 13.1% 982.5 716.7	1.6 38.5% 4.5 4.1	15.8 34.7%	0.4 30.7%	3.1 12.3%	616.5 21.0% 4035.0
DEFFICIENT OF DEFFICIENT OF nalyses performed by 12/02/02 12/02/02 12/03/02	VARIATION /ELS. 02-0767 02-0768 02-0769	8.5 31.1% 33.5 16.6 23.2	NA NA <1.005 <1.0184 <1.0164	9.3 28.6% 43.2 24.6 24.3	15.5 29.0% 45.7 35.6 30.7	92.3 13.1% 982.5 716.7 890.4	1.6 38.5% 4.5	<u>15.8</u> 34.7% 42.6	0.4 30.7% 1.8	3.1 12.3% 34.0	616.5 21.0% 4035.0 2295.2
TANDARD DEV COEFFICIENT OF nalyses performed by 12/02/02 12/02/02 12/03/02 12/03/02	VARIATION (ELS. 02-0767 02-0768 02-0769 02-0770	8.5 31.1% 33.5 16.6 23.2 16.8	NA NA <1.005 <1.0184 <1.0164 <0.9860	9.3 28.6% 43.2 24.6 24.3 26.6	15.5 29.0% 45.7 35.6	92.3 13.1% 982.5 716.7	1.6 38.5% 4.5 4.1	15.8 34.7% 42.6 66.2	0.4 30.7% 1.8 <1.0184	3.1 12.3% 34.0 29.0	616.5 21.0% 4035.0 2295.2 2041.2
COEFFICIENT OF 000000000000000000000000000000000000	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771	8.5 31.1% 33.5 16.6 23.2 16.8 26.0	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964	9.3 28.6% 43.2 24.6 24.3	15.5 29.0% 45.7 35.6 30.7	92.3 13.1% 982.5 716.7 890.4	1.6 38.5% 4.5 4.1 9.1	15.8 34.7% 42.6 66.2 26.5	0.4 30.7% 1.8 <1.0184 1.1	3.1 12.3% 34.0 29.0 29.5	616.5 21.0% 4035.0 2295.2 2041.2 2638.4
COEFFICIENT OF DEFFICIENT OF Data Stress performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968	9.3 28.6% 43.2 24.6 24.3 26.6	15.5 29.0% 45.7 35.6 30.7 32.6	92.3 13.1% 982.5 716.7 890.4 590.2	1.6 38.5% 4.5 4.1 9.1 6.0	15.8 34.7% 42.6 66.2 26.5 22.9	0.4 30.7% 1.8 <1.0184 1.1 <0.986	3.1 12.3% 34.0 29.0 29.5 55.8	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1
TANDARD DEV COEFFICIENT OF malyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112	9.3 28.6% 43.2 24.6 24.3 26.6 29.5	15.5 29.0% 45.7 35.6 30.7 32.6 42.1	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8	1.6 38.5% 4.5 4.1 9.1 6.0 4.7	15.8 34.7% 42.6 66.2 26.5 22.9 36.1	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3
COEFFICIENT OF COEFFICIENT OF malyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/04/02 12/05/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8	1.6 38.5% 4.5 4.1 9.1 6.0 4.7 13.7	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4
TANDARD DEV COEFFICIENT OF nalyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/03/02 12/04/02 12/05/02 12/05/02 12/06/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3 23.5	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3 43.8	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5 35.8	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8 1605.6	1.6 38.5% 4.5 4.1 9.1 6.0 4.7 13.7 8.8	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2 42.1	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0 1.5	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5 23.7	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4 2438.2
TANDARD DEV COEFFICIENT OF nalyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112 <0.5256	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3 43.8 31.8	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5 35.8 38.9	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8 1605.6 1357.8	1.6 38.5% 4.5 4.1 9.1 6.0 4.7 13.7 8.8 7.2	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0 1.5 1.5 1.1	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5 23.7 25.7	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4 2438.2 2214.0
TANDARD DEV COEFFICIENT OF analyses performed by 12/02/02 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/05/02 12/05/02 12/06/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3 23.5 15.7	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112 <0.5256 <0.5166 <0.4914	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3 43.8 31.8 28.7 15.7	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5 35.8 38.9 41.2 35.4	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8 1605.6 1357.8 1082.4 251.2	1.6 38.5% 4.1 9.1 6.0 4.7 13.7 8.8 7.2 7.0 2.6	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2 42.1 32.2	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0 1.5	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5 23.7	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4 2438.2 2214.0
TANDARD DEV COEFFICIENT OF malyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/03/02 12/04/02 12/05/02 12/05/02 12/06/02 12/06/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775 02-0776	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3 23.5 15.7 22.4	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112 <0.5256 <0.5166 <0.5166 <0.4914	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3 43.8 31.8 28.7 15.7 29.9	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5 35.8 38.9 41.2 35.4 37.1	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8 1605.6 1357.8 1082.4 251.2 1038.2	1.6 38.5% 4.5 4.1 9.1 6.0 4.7 13.7 8.8 7.2 7.0 2.6 6.8	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2 42.1 32.2 28.3 37.4	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0 1.5 1.5 1.1	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5 23.7 25.7	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4 2438.2 2214.0 1154.4
TANDARD DEV COEFFICIENT OF analyses performed by 12/02/02 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/05/02 12/05/02 12/06/02	VARIATION /ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775 02-0775	8.5 31.1% 33.5 16.6 23.2 16.8 26.0 23.2 23.7 22.3 23.5 15.7	NA NA <1.005 <1.0184 <1.0164 <0.9860 <0.4964 <0.4968 <0.5112 <0.5256 <0.5166 <0.4914	9.3 28.6% 43.2 24.6 24.3 26.6 29.5 31.3 43.8 31.8 28.7 15.7	15.5 29.0% 45.7 35.6 30.7 32.6 42.1 33.5 35.8 38.9 41.2 35.4	92.3 13.1% 982.5 716.7 890.4 590.2 1649.8 1255.8 1605.6 1357.8 1082.4 251.2	1.6 38.5% 4.1 9.1 6.0 4.7 13.7 8.8 7.2 7.0 2.6	15.8 34.7% 42.6 66.2 26.5 22.9 36.1 38.4 39.2 42.1 32.2 28.3	0.4 30.7% 1.8 <1.0184 1.1 <0.986 1.5 1.5 2.0 1.5 1.5 1.1 1.0	3.1 12.3% 34.0 29.0 29.5 55.8 22.7 21.3 23.5 23.7 25.7 25.7 23.0	616.5 21.0% 4035.0 2295.2 2041.2 2638.4 2460.1 2187.3 3038.4 2438.2 2214.0

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
06/02/03	15503164	15.1	<0.504	15.1	100.8	5460.0	1.3	226.8	<0.504	23.5	1428.0
06/02/03	15503165	22.8	<0.501	22.8	44.6	637.0	1.3	91.0	<0.501	26.4	13650.0
06/03/03	15503166	11.4	<0.502	14.1	20.2	1056.0	1.1	11.4	<0.502	10.6	1320.0
06/04/03	16103027	22.3	<0.501	25.4	30.8	700.7	2.5	100.1	<0.501	23.1	2926.0
06/04/03	16103028	16.2	<0.502	15.3	28.9	272.0	7.0	22.1	<0.502	11.9	1445.0
06/05/03	16103029	37.2	<0.502	33.4	47.1	661.2	3.9	35.7	<0.502	36.5	3876.0
06/05/03	16103030	28.1	<0.503	24.8	48.2	522.6	5.2	20.1	<0.502	20.8	2345.0
06/06/03	16103031	30,4	< 0.504	30.4	43.2	600.0	3.4	40.0	< 0.504	33.6	2800.0
06/06/03	16103032	34.2	<0.502	35.0	50,9	699.2	4.3	64.6	<0.504	21.3	5472.0
06/07/03	16103026	58.2	<0.500	31.2	53.3	680.6	3.7	76.3	<0.500	32.0	4674.0
AVERAGE		27.6	NA	24.7	46.8	1128.9	3.4	68.8	I NA	24.0	3993.6
STANDARD DEVI		13.0	NA	7.4	20.7	1455.2	1.8	60.2	NA	8.1	3484.5
COEFFICIENT OF	VARIATION	47.0%	NA	30.1%	44.2%	128.9%	52.9%	87.5%	NA	34.0%	87.3%

Analyses performed by Upstate Laboratories Inc.

06/14/04	E1540	32.1	<1.0152	26.2	44.8	829.1	3.0	39.8	0.8	27.1	3553.2
06/14/04	E1541	25.9	<0.9812	22.3	42.8	651.2	1.2	25.0	0.7	20,5	2586.8
06/15/04	E1542	38.2	<1.0188	28.0	66.2	1273.5	2.5	55.2	1.1	43.3	3226.2
06/15/04	E1543	43.4	<10.2	38.3	85.0	935.0	6.5	102.0	<5.015	<50.2	3400.0
06/16/04	E2029	33.0	<1.0164	38.1	52.5	931.7	5.0	52.5	1.3	30.5	3642.1
06/16/05	E2030	31.2	<1.014	37.4	45.2	1014.0	3.0	319.8	2.0	22.6	3978.0
06/17/05	E2031	26.0	<1.0068	32.7	56.2	662.8	3.6	36.9	1.3	25.2	3523.8
06/23/04	E2626	27.5	<0.9984	31.6	56.6	807.0	3.8	35.8	1.8	25.0	3244.8
06/25/04	E2627	45.8	<0.975	73.5	63.8	1425.0	5.6	82.5	1.7	25.5	5850.0
06/27/04	E2628	44.7	<0.9924	65.3	62.0	992.4	3.2	48.0	1.7	34.7	3721.5
VERAGE		34.8	NA	39.4	57.5	952.2	3.8	79.7	1.2	25.4	3672.6
TANDARD DEVI		7.3	NA	15.9	12.0	233.1	1.5	83.0	0.6	10.6	806.8
OEFFICIENT OF	VARIATION	21.1%	NA	40.5%	20.9%	24.5%	39.5%	104.1%	46.4%	41.5%	22.0%

Analyses per	formed by O' Brien & Gere Laboratories, Inc	

				12.370	23.2%	43.7%	53.4%	51.8%	17.1%	25.0%	15.4%
DEFFICIENT OF	VARIATION	15.5%	NA	12.3%	11.0 23.2%	412.6	3.0	23.4	0.2	6.5	550.9
ANDARD DEV	IATION	2.8	NA	4.2		943.4	5.6	45.2	1.44	25.8	3585.8
ERAGE		18.3	NA I	34.2	47,4	0404					
		10.0	1 -0.9084	34.7	51.6	637.5	3.4	45.2	1.4	22.6	3470.1
12/30/04	F1520	18.6	<0.9684					27.6	0.8	18.7	2926.8
12/30/04	F1519	14.6	<0.9756	35.0	33.3	626.0	4.9				3670.8
12/29/04	F1518	21.5	<1.0374	42.3	51.9	1436.4	4.5	46.3	1.3	28.7	
12/29/04	F1517	19.0	<0.9888	33.8	39.6	824.0	3.5	28.8	1.0	33.8	3213.6
	F1516	17.9	<1.0024	35.8	48.0	615.8	4.2	70.2	1.0	17.2	3150.4
12/28/04		14.9	<0.9698	29.8	74.6	1119.0	4.6	33.6	0.7	32.8	3058.6
12/28/04	F1515		<0.9672	28.2	47.6	660.9	7.3	104.8	1.5	24.2	4836.0
12/27/04	F1514	20.2			43.9	1052.4	14.0	38.6	0.9	36.8	4034.2
12/27/04	F1513	23.7	<0.9647	38.6				27.9	1.1	21.1	3468.4
12/23/04	F1434	17.3	<0.9802	35.4	49.0	1885.0	5.4				4029.0
12/23/04	F1433	15.0	<1.027	28.4	34.8	576.7	4.3	29.2	0.7	22.1	4020 0

Analyses performed by O' Brien & Gere Laboratories, Inc

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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
05/16/05	0505100-001A	46,3	<0.9977	46.3	58.0	1542	3.6	39.0	1,4	47.2	5623
05/16/05	0505100-002A	45.0	<0.9648	39.4	59.5	1045	3.5	39.4	1.4	37.0	4904
05/17/05	0505100-003A	44.9	<0.9867	50.2	71.8	1704	3.9	82.5	1.5	29.6	5292
05/17/05	0505100-004A	61.5	<1.0104	63.2	69.9	2021	4.0	64.8	1.8	31,2	6399
05/18/05	0505131-001A	48.9	<0.9614	54.2	73.4	1311	4.1	81.3	1.6	34.1	5419
05/18/05	0505131-002A	37.9	<1.0104	52.2	60.6	1768	4.0	41.3	1.7	26.9	4968
05/19/05	0505131-003A	36.7	<0.9996	48.3	54.1	1166	4.1	40.8	1.2	29.2	4498
05/19/05	0505131-004A	47.7	<0.9708	55.0	57,4	1294	4.8	44.5	1.4	29.1	5663
05/20/05	0505131-005A	40.1	<0.9612	48.1	48.1	1282	0.6	48.9	0.9	37.6	4886
05/20/05	0505131-006A	42.6	<0.9636	61.8	112.4	1445	4.9	216.8	1.5	24.1	6103
AVERAGE		45.1	NA	51.9	66.5	1457.9	3.7	60.0	1 4 4 1		
STANDARD DEV		6.7	NA	6.8	17.1	285.6	1.1	<u>69.9</u> 51.5	1.4 0.2	<u>32.6</u> 6.3	<u>5376</u> 559
COEFFICIENT O	F VARIATION	14.8%	NA	13.1%	25.7%	19.6%	30.2%	73.7%	16.6%	19.4%	10.4%

Analyses performed by Life Science Laboratories, Inc.

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
12/12/05	0512118-001A	<u>24</u> .1	<0.9972	40.7	50.7	997	4.1	58.2	1.1	<99.72	6814
12/12/05	0512118-002A	18.3	<0.9932	28.3	45.8	1452	2.4	37.4	1.2	19.9	2903
12/13/05	0512118-003A	16.9	<1.0152	41.5	45.7	1184	3.3	195	0.7	31.3	3976
12/13/05	0512118-004A	20.9	<1.002	30.9	68.5	1086	<0.100	61.0	1.1	<50.1	3340
12/14/05	0603017-001A	13.6	<0.9789	27.1	39.9	1280	2.9	35.4	0.5		
12/14/05	0512118-006A	20.0	<0.9984	30.8	56.6	599	2.7	42.4	0.5	30.9	3313
12/15/05	0512142-001A	13.5	<1.0309	23.8	38.9	492	1.7	79.3	0.7	<49.92	3245
12/15/05	0512142-002A	21.8	< 0.9684	40.4	47.6	1049	4.4	29.9		<49.96	2775
12/16/05	0512142-003A	18.6	<1.0024	29.4	48.0	859	3.4	35.8	1.1	27.4	3793
12/16/05	0512142-004A	19.7	< 0.9854	41.7	40.9	834			1.4	<50.12	2936
					40.0	0.04	4.2	30.3	1.7	25.8	4321
		18.7	NA	33,4	48.3	983.2	3.2	60,4	1.0	27.0	07/0
STANDARD DEV	ATION	3.2	NA	6.5	8.4	281.1	0.8	47.2	0.3	<u> 27.0</u> 4.2	<u>3742</u> 1127
SOLT TOLENT OF		<u>1</u> 7.1%	NA	19.5%	17.4%	28.6%	25.0%	78.1%	32.3%	15.6%	30.1%

SAMPLE COLLECTION DATE	LA8 #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
04/10/06	0604077-001A	40.8	<0.978	67.6	46.5	1467	2.0	35.9	1.47	27.7	5216
04/11/06	0604077-002A	47.5	<1.02	63.3	59.3	1345	6.0	36.4	1.11	24.5	4825
04/12/06	0604090-001A	27.9	<0.986	32.1	78.9	904	1.0	18.1	1.1	38.6	4274
04/13/06	0604090-002A	39.0	<0.995	50.6	42.3	995	3.3	69.6	1.58	45.6	4477
04/14/06	0604090-003A	40.5	<1.03	68.0	52.5	1292	8.5	38.7	1.00	25.8	4994
NA	NA										7334
NA	NA				1						
NA	NA										
NA	NA										
NA	NA										

AVERAGE		NA	56.3	55.9	1200.4	4.2	39.7	1,3	32.5	4757
STANDARD DEVIATION	6.3	NA	13.7	12.9	214.6	2.7	16.7	0.2	8.2	341
COEFFICIENT OF VARIATION	16.1%	NA	24.3%	23.0%	17.9%	65.8%	42.0%	15.6%	25.4%	7.2%

Analyses performed by Life Science Laboratories, Inc

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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V	Zn
08/07/06	0608136-001A	42.7	<1.01	39.4	38.5	838	2.8	117.3	1.01	28.5	<u>Zinc</u> 3687
08/08/06	0608136-002A	41.3	<0.972	43.7	41.3	1133	4.0	35.6	1.21	27.5	4288
08/09/06	0608136-003A	22.0	<0.984	25.7	28.8	477	3.0	22.7	0.72	25.0	2271
08/10/06	0608136-004A	33.3	<1.00	40.0	47.5	1583	2.4	108.3	1.00	37.5	3332
08/11/06	0608136-005A	28.2	<0.968	33.9	57.3	888	1.0	36.3	0.61	48.4	
08/14/06	0608136-006A	35.0	<1.03	35.0	54.9	795	2.4	67.6	0.95	40.4	3389
08/15/06	0608136-007A	28.9	<0.965	26.3	68,4	509	0.3	149.1	0.59	78.9	3101
08/16/06	0608136-008A	23.3	<0.962	24.9	28.9	553	< 0.096	44.9	0.54	30.5	2806
08/17/06	0608136-009A	27.9	<0.960	35.8	48.0	960	< 0.096	37.5	0.66	34.9	3449
08/18/06	0608136-010A	21.8	<0.970	26.7	46.1	2262	2.1	63.0	0.65	36.4	6635
									0.00		2747
		30.4	NA	33.1	46.0	999.8	3.2	68.2	0.8	27.0	2570
TANDARD DEV		7.1	NA	6.5	11.8	524.2	0.8	40.3	0.2	4.2	3570
OEFFICIENT O	VARIATION	23.4%	NA	19.6%	25.6%	52.4%	25.0%	59.0%	27.5%	4.2	<u>1149</u> 32.2%

SAMPLE COLLECTION DATE	LAB	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
04/23/07	0704181-001A	33.2	<0.996	42.3	51.5	1079	7.4	65.6	<0.996	27,4	3901
04/23/07	0704181-002A	30.5	<1.0152	54.1	43.1	1100	4.5	39.8	<1.0152	<u> </u>	4315
04/24/07	0704181-003A	32.6	<1.0032	58.5	49.3	1338	6.0	37.6	<1.0032	21.7	11704
04/24/07	0704181-004A	40.8	<0.9646	89.0	54.9	1336	5,0	39.3	1.558	17.8	6233
04/25/07	0704181-005A	45.0	<1.015	94,3	54.4	1450	6.9	44.2	1.667	17.4	6018
04/25/07	0704181-006A	36.2	<1.0244	62.3	63.8	1340	3.6	62.3	<1.0244	21.3	4728
04/26/07	0704186-001A	40.8	<0.9997	100	47.7	1615	5.9	56.1	1.307	17.7	6537
04/26/07	0704186-002A	34.4	<0.9945	66.6	65.8	1301	3.7	133.1	0.995	19.9	5508
04/27/07	0704186-003A	34.1	<1.0088	59.8	201.8	1009	7.1	85.4	<1.0088	34.9	4501
04/27/07	0704186-004A	33.1	<0.9684	42.8	75.1	968	3.7	145.3	<0.9684	29.1	3874

AVERAGE	36.1	NA	67.0	70.7	1253	5.4	70.9	1.4	22.4	5732
STANDARD DEVIATION	4.4	NA	19.6	44.6	197	1.4	37.0	.0.3	5.8	2192
COEFFICIENT OF VARIATION	12.1%	NA	29.2%	63.1%	15.7%	25.8%	52.3%	18.7%	25.7%	38.2%
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SAMPLE]	·····	
COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	NI	Se	v	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercurv	Nickel		Vanadium	
08/09/07	0708082-001A	38.9	<0.972	38.9	52.7	2187	3.5	56.7	1.46	39.7	
08/10/07	0708082-002A	39.3	<1.0032	30.1	275.9	828	2.4	242	2.17	41.0	3240
08/14/07	0708121-001A	36.7	<1.002	45.9	43.4	919	4.3	91.9	1.67	30.9	<u>3344</u> 3925
08/14/07	0708121-002A	36.0	<0.96	45.6	55.2	1120	5.1	40.8	2.16	36.8	
08/15/07	0708121-003A	31.7	<0.9768	32.6	154.7	2035	2.4	130.2	1.79	34.2	4160
08/15/07	0708121-004A	50.7	<1.014	85.8	38.2	140	6.4	28.9	1.79		3337
08/16/07	0708121-005A	46.4	<5.031	54.2	44.1	759	5.6	92.9	<5.031	25.7	5694
08/16/07	0708121-006A	63.5	<1.0332	88.6	36.2	2509	8.9	26.6	1.99	<24.768	4102
08/17/07	0708121-007A	37.9	<1.0257	46.6	41.8	1026	4.6	31.6	1.81	22.9	6494
08/17/07	0708121-008A	49.4	<1.0005	52.7	35.4	934	4.9	23.3	1.47	32.3	4655
								20.0		19.3	4402
VERAGE		43.0	NA	52.1	77.7	1246	3.2	76.5	1.8	070	4005
TANDARD DEV		9.0	NA	19.0	74.2	708	0.8	65.0		27.0	4335
OEFFICIENT O	F VARIATION	20.8%	NA	36.5%	95.4%	56.8%	25.0%		0.2	4.2	1002
						00.070	20.070	84.9%	<u>13.6%</u>	15.6%	23.1%

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
04/25/08	0805009-001A	56.4	<1.0036	131.2	46,3	1775.6	10.0	26.2	1.2	27.0	7642.8
04/28/08	0805009-002A	76.3	<1.0068	83.9	42.0	1342.4	5.5	52.0	1.5	21.8	6040.8
04/29/08	0805009-003A	43.5	<0.966	37.8	58.0	885.5	2.4	161.0	<1.2	35.4	3783.5
04/29/08	0805009-004A	71.3	<1.0192	87.4	61.9	1674.4	7.1	56.8	1.4	27.7	5896.8
04/30/08	0805021-001A	37.8	<1.0244	48.1	69.3	1024.4	2.9	65.4	<1.3	38.6	3861.2
04/30/09	0805021-002A	60.6	<0.9841	83.3	83.3	1135.5	9.1	27.3	1.5	24.2	5904.6
05/01/08	0805021-003A	38.6	<0.9864	42.7	56.7	813.8	2.5	33.7	<1.2	36.2	3945.6
05/01/08	0805021-004A	71.8	<0.9828	98.3	43.8	1512.0	7.1	24.9	2.0	18.9	7560.0
05/02/08	0805021-005A	30.7	<0.9684	36.3	58.1	677.9	2.8	37.9	<1.2	31.5	5326.2
05/02/08	0805021-006A	56.6	<1.0218	69.2	52.7	1179.0	4.9	36.2	1.3	41.7	6523.8

AVERAGE	54.4	NA	71.8	57.2	1202	5.4	52.1	1.5	30.3	5649
STANDARD DEVIATION	15.2	NA	29.3	11.8	351	2.7	38.6	0.7	7.2	1355
COEFFICIENT OF VARIATION	28.0%	NA	40.8%	20.7%	29.2%	49.0%	74.0%	16.8%	23.7%	24.0%
										1.1070

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SAMPLE											
COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	##	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel		Vanadium	
12/19/08	0812217-001A	23.7	<1.0066	48,9	65.4	1006.6	7.9	42.4	1.1	20.1	4242.1
12/19/08	0812217-002A	20.5	<1.0231	50.4	55.1	1495.3	6.1	60.6	1.2	18.1	3777.0
12/20/08	0812217-003A	25.7	<1.029	58.8	28.7	808.5	6.1	52.9	1.5	17.6	4851.0
12/22/08	0812217-004A	25.3	<0.9792	23.7	62.0	546.7	4.8	39.2	<0.9792	49.8	2366.4
12/23/08	0812217-005A	<20.331	<20.331	45.2	143.1	753.0	10.5	143.1	<20.331	43.0	3087.3
12/23/08	0812217-006A	20.4	<0.9828	25.7	42.3	831.6	3.1	34.0	<0.9828		
12/24/08	0812217-007A	18.0	<0.9776	32.3	112.8	511.4	4.9	195.5	1.2	24.2	2268.0
12/29/08	0901008-001A	38.3	<0.975	66.8	43.5	2700.0	5.6	28.5	1	34.6	3008.0
12/30/08	0901008-002A	17.9	<0.9685	48.4	41.0	1192.0	5.6	24.6	1.3	18.0	4800.0
12/30/08	0901008-003A	14.4	<0.988	36.5	44.1	912.0	3.6		1.1	13.4	3650.8
					44.1	312.0	3.0	38.8	<0.988	22.8	2812.0
VERAGE		22.7	NA	43.7	63.8	1076	£0				
TANDARD DEV	IATION	6.5	NA	13.3	34.3		5.8	66.0	1.2	26.2	3486
DEFFICIENT O	F VARIATION	28.7%	NA	30.4%		608	2.0	53.9	0.2	11.5	886
				30.4%	53.8%	56.5%	34.7%	81.8%	12.3%	44.1%	25.4%

Sample	T	1									
Collection	Lab	As	Be	Cď	Cr	Pb	Hg	Ni	Se	v	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
5/11/2009	0905077-001A	38.8	<1.0	32.9	69.2	1012.8	2.6	50.6	1.1	41.4	3798
5/11/2009	0905077-002A	48.4	<1.0	60.0	72,3	999.7	2.9	35.4	3.8	32.3	4537.1
5/12/2009	0905077-003A	64.2	<1.0	70.6	58.5	1203.0	3.4	27.3	5,1	36.1	5453.6
5/12/2009	0905077-004A	80.6	<1.0	80.6	61.3	3707.6	5.6	96.7	5.3	26.6	6931.6
5/13/2009	0905108-001A	51.2	<1.0	56.2	62.8	1156.4	3.7	65.3	2,5	38.0	4790.8
5/13/2009	0905108-002A	39.7	<1.0	33.2	137.7	972.0	1.9	170.1	1,1	55.1	4131
5/14/2009	0905106-003A	45.4	<1.0	57.0	50.8	1463.0	4.4	54.7	2.0	29.3	7700
5/14/2009	0905106-004A	39.4	<1.0	41.1	53,4	985.2	2.7	55.0	1.7	34.5	4269.2
5/15/2009	0905106-005A	37.3	<1.0	51.1	57.6	1703.1	3.2	51.9	1.2	31.6	4217.2
5/15/2009	905106-006A	35.6	<1.0	34.7	59.5	769,1	1,8	78.6	<1.0	39.7	4217.7
											
Average		48.1	NA	51.7	68.3	1397.2	3.2	68.6	2.7	36,4	5004.6
Standard Dev	riation	14.3	NA	16.3	25.2	855.2	1.1	40.8	1.7	8.0	1309.9
Coefficient of	variation	29.7%	NA	31.6%	36.9%	61.2%	34.8%	59.5%	63.1%	22.0%	26.2%
											20,270
Sample Collection	1 - 1										
Collection Date	Lab #	As	Be	Cd	. Cr	Pb	Hg	Ni	Se	V	Zn
10/16/2009	# 0910091-006A	Arsenic	Beryllium	Cadmlum	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
10/10/19/09	0910091-008A	29	<1.0	44	58	620	3.2	48	2	26	26000
10/20/2009	0910091-007A	50	<1.0	86	38	1500	5.7	23	1.1	27	6300
10/20/2009	0910091-009A	35	<1.0	51	37	710	4.1	29	<1.0	23	4200
10/21/2009	0910113-008A	50 46	<1.0	88	41	1300	7.4	45	1.2	21	6100
10/21/2009	0910113-009A	40	<1.0	74	48	1300	2.6	32	1.1	36	5600
10/22/2009	0910113-010A	45 29	<1.0	87	36	1100	2.8	23	1.2	25	6200
10/22/2009	0910113-011A	30	<1.0	43	37	660	7.9	24	<1.0	30	3900
10/23/2009	0910113-011A		<1.0	64	78	900	3.8	55	2.5	26	5100
10/24/2009	0910113-012A	<u>33</u> 40	<1.0		43	1000	8.9	40	2.6	18	6000
	010110-010A	40	<1.0	100	35	1400	7.9	32	2.7	15	7700
Average		38.7							······		·
Standard D	eviation	8.6	NA	71.4	45.1	1051	5.43	35.1	1.8	24.7	7710
Coefficient of		22.1%	NA NA	20.0	13.5	318.8	2.4	11.3	0.7	6.0	6516,4
·		FE. 170		28.1%	30.0%	30.3%	44.5%	32.3%	40.3%	24.1%	84.50%

Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
5/24/2010	1006054-013A	45.0	<1.0	63.0	55.0	1000.0	3.4	47.0	1.8	38.0	5200
5/25/2010	1006054-014A	34.0	<1.0	44.0	48.0	660.0	2.5	44.0	1.1	35.0	3800
5/25/2010	1006054-015A	43.0	<1.0	72.0	47.0	1000.0	4.1	31.0	1.6	21.0	6300
5/26/2010	1006054-016A	24.0	<1.0	36.0	35.0	820.0	2.4	26.0	<1.0	28.0	3400
5/26/2010	1006054-017A	30.0	<1.0	49.0	46.0	1500.0	3.3	43.0	<1.0	35.0	4300
5/27/2010	1006054-018A	27.0	<1.0	39.0	40.0	530.0	4.5	57.0	<1.0	27.0	3000
5/27/2010	1006054-019A	34.0	<1.0	54.7	53.0	1100.0	5.8	38.0	1.3	28.0	4200
5/28/2010	1006054-020A	32.0	<1.0	32.0	57.0	560.0	3.5	27.0	<1.0	20.0 54.0	3300
5/28/2010	1006054-021A	37.0	<1.0	45.0	56.0	720.0	3.3	46.0	<1.0		
5/29/2010	1006054-022A	54.0	<1.0	46.0	56.0	800.0	5.3	28.0	<1.0	33.0	4300
	· · · · · · · · · · · · · · · · · · ·				00.0	000.0	0.0	20.0	<1.0	34.0	4100
Average		36.0	NA	48.1	49.3	869.0	2.0	20.7	4.5		
Standard Dev	viation	9.1	NA				3.8	38.7	1.5	33.3	4190.0
Coefficient of		25.2%	NA	12.3 25.5%	7.5 15.2%	292.4 33.6%	1.1 29.3%	10.4 26.9%	0.3 21.4%	8.8	971.2
Sample Collection	lah	Δe	Ba	Cd	6.	Dh					
Collection	Lab #	As	Be	Cd	Cr	Pb	Hg	N	Se	V	Zn
Collection Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
Collection		Arsenic 64	Beryllium <1.0	Cadmium 66	Chromium 67	Lead 990	Mercury 4.6	Nickel 160	Selenium 3,9	Vanadium 26	Zinc 5200
Collection Date 9/27/2010	# 1010020-013A	Arsenic 64 30	Beryllium <1.0 <0.94	Cadmium 66 73	Chromium 67 82	Lead 990 660	Mercury 4.6 2.6	Nickel 160 36	Selenium 3,9 1.7	Vanadium 26 39	Zinc 5200 4100
Collection Date 9/27/2010 9/28/2010	# 1010020-013A 1010020-014A	Arsenic 64	Beryllium <1.0 <0.94 <0.94	Cadmium 66 73 70	Chromium 67 82 33	Lead 990 660 870	Mercury 4.6 2.6 6.6	Nickel 160 36 26	Selenium 3,9 1.7 1.1	Vanadium 26 39 21	Zinc 5200 4100 4400
Collection Date 9/27/2010 9/28/2010 9/28/2010	# 1010020-013A 1010020-014A 1010020-015A	Arsenic 64 30 26 30	Beryllium <1.0 <0.94 <0.94 <1.0	Cadmium 66 73 70 55	Chromium 67 82 33 52	Lead 990 660 870 840	Mercury 4.6 2.6 6.6 4.1	Nicke1 160 36 26 74	Selenium 3.9 1.7 1.1 1.3	Vanadium 26 39 21 31	Zinc 5200 4100 4400 4800
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A	Arsenic 64 30 26	Beryllium <1.0 <0.94 <0.94	Cadmium 66 73 70 55 71	Chromium 67 82 33 52 48	Lead 990 660 870 840 990	Mercury 4.6 2.6 6.6 4.1 6.8	Nickel 160 36 26 74 32	Selenium 3.9 1.7 1.1 1.3 1.9	Vanadium 26 39 21 31 34	Zinc 5200 4100 4400 4800 5500
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A	Arsenic 64 30 26 30 49	Beryllium <1.0 <0.94 <0.94 <1.0 <0.98	Cadmium 66 73 70 55	Chromium 67 82 33 52	Lead 990 660 870 840	Mercury 4.6 2.6 6.6 4.1 6.8 3.8	Nickel 160 36 26 74 32 49	Selenium 3.9 1.7 1.1 1.3 1.9 2.3	Vanadium 26 39 21 31 34 25	Zinc 5200 4100 4400 4800 5500 5100
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-018A	Arsenic 64 30 26 30 49 38	Beryllium <1.0 <0.94 <0.94 <1.0 <0.98 <0.96	Cadmium 66 73 70 55 71 72	Chromium 67 82 33 52 48 55	Lead 990 660 870 840 990 1200	Mercury 4.6 2.6 6.6 4.1 6.8	Nickel 160 36 26 74 32 49 40	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2	Vanadium 26 39 21 31 34 25 22	Zinc 5200 4100 4400 4800 5500 5100 6600
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-018A 1010020-019A	Arsenic 64 30 26 30 49 38 45	Beryllium <1.0 <0.94 <1.0 <1.0 <0.98 <0.96 <1.0	Cadmium 66 73 70 55 71 72 110	Chromium 67 82 33 52 48 55 37	Lead 990 660 870 840 990 1200 1300	Mercury 4.6 2.6 6.6 4.1 6.8 3.8 2.5	Nickel 160 36 26 74 32 49 40 60	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2 1.1	Vanadium 26 39 21 31 34 25 22 49	Zinc 5200 4100 4400 4800 5500 5100 6600 3100
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-018A 1010020-019A 1010020-019A	Arsenic 64 30 26 30 49 38 45 21	Beryllium <1.0 <0.94 <1.0 <1.0 <0.98 <0.96 <1.0 <0.94	Cadmium 66 73 70 55 71 72 110 33	Chromium 67 82 33 52 48 55 37 69	Lead 990 660 870 840 990 1200 1300 1300	Mercury 4.6 2.6 6.6 4.1 6.8 3.8 2.5 2.4	Nickel 160 36 26 74 32 49 40	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2	Vanadium 26 39 21 31 34 25 22 49 46	Zinc 5200 4100 4400 4800 5500 5100 6600 3100 3700
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010 10/1/2010 10/2/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-018A 1010020-019A 1010020-020A 1010020-021A	Arsenic 64 30 26 30 49 38 45 21 27 26	Beryllium <1.0 <0.94 <1.0 <0.98 <0.96 <1.0 <0.94 <1.0 <1.0 <1.0	Cadmium 66 73 70 55 71 72 110 33 38	Chromium 67 82 33 52 48 55 37 69 56	Lead 990 660 870 840 990 1200 1300 1300 820	Mercury 4.6 2.6 6.6 4.1 6.8 3.8 2.5 2.4 1.6	Nickel 160 36 26 74 32 49 40 60 56	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2 1.1 1.4	Vanadium 26 39 21 31 34 25 22 49	Zinc 5200 4100 4400 4800 5500 5100 6600 3100
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010 10/1/2010 10/2/2010	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-019A 1010020-019A 1010020-020A 1010020-021A 1010020-022A	Arsenic 64 30 26 30 49 38 45 21 27 26 35.6	Beryllium <1.0 <0.94 <1.0 <0.98 <0.96 <1.0 <0.94 <1.0 <1.0 <1.0	Cadmium 66 73 70 55 71 72 110 33 38 54 64.2	Chromium 67 82 33 52 48 55 37 69 56	Lead 990 660 870 840 990 1200 1300 1300 820	Mercury 4.6 2.6 6.6 4.1 6.8 3.8 2.5 2.4 1.6	Nickel 160 36 26 74 32 49 40 60 56	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2 1.1 1.4	Vanadium 26 39 21 31 34 25 22 49 46 32	Zinc 5200 4100 4400 5500 5100 6600 3100 3700 4100
Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 10/1/2010 10/1/2010 10/2/2010 Average	# 1010020-013A 1010020-014A 1010020-015A 1010020-016A 1010020-017A 1010020-019A 1010020-019A 1010020-020A 1010020-021A 1010020-022A	Arsenic 64 30 26 30 49 38 45 21 27 26	Beryllium <1.0 <0.94 <1.0 <0.98 <0.96 <1.0 <0.94 <1.0 <1.0 <1.0	Cadmium 66 73 70 55 71 72 110 33 38 54	Chromium 67 82 33 52 48 55 37 69 56 59	Lead 990 660 870 840 990 1200 1300 1300 820 1100	Mercury 4.6 2.6 6.6 4.1 6.8 3.8 2.5 2.4 1.6 3.9	Nickel 160 36 26 74 32 49 40 60 56 32	Selenium 3.9 1.7 1.1 1.3 1.9 2.3 2.2 1.1 1.4 1.7	Vanadium 26 39 21 31 34 25 22 49 46	Zinc 5200 4100 4400 4800 5500 5100 6600 3100 3700

Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
6/7/2011	K1106170-013A	51.0	0.4	56.0	57.0	1400.0	3.1	29.0	1.8	35.0	4800
6/7/2011	K1106170-014A	46.0	0.3	76.0	49.0	1000.0	5.5	23.0	1.7	27.0	5200
6/8/2011	K1106170-015A	45.0	0.4	53.0	56.0	850.0	2.5	65.0	1.7	32.0	4900
6/8/2011	K1106170-016A	52.0	0.3	81.0	59.0	1700.0	7.0	34.0	1.5	29.0	5600
6/9/2011	K1106170-017A	39.0	0.3	61.0	50.0	1100.0	3.6	50.0	1.6	29.0	5200
6/9/2011	K1106170-018A	41.0	0.4	61.0	46.0	710.0	4.0	32.0	2.3	30.0	5100
6/10/2011	K1106170-019A	22.0	0.6	31.0	57.0	500.0	6.4	32.0	3.1	33.0	3300
6/10/2011	K1106170-020A	34.0	0.4	52.0	52.0	980.0	3.3	40.0	1.9	34.0	4300
6/11/2011	K1106170-021A	29.0	0.5	37.0	53.0	800.0	4.8	36.0	1.4	44.0	5000
6/11/2011	K1106170-022A	35.0	0.4	54.0	51.0	920.0	4.2	32.0	1.2	30.0	5000
									,		
Average		39.4	0.4	56.2	53.0	996.0	4,4	37.3	1.9	32.3	4840.0
Standard De	viation	9.6	0.1	15.2	4.2	343.7	1.5	12.0	0.5	4.8	634.6
Coefficient of	fvariation	24.4%	40.404	AT 141							
		24.4%	19.4%	27.1%	7.9%	34.5%	33.1%	32.3%	27.7%	14.9%	13.1%
Sample Collection	Lab										
Sample	1	As Arsenic	Be Beryllium	27.1% Cd Cadmium	Cr	34.5% Pb Lead	Hg	Ni	Se	v	Zn
Sample Collection	Lab	As	Be	Cd		Pb				V Vanadium	Zn Zinc
Sample Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Нg Мегсигу	Ni Nickel	Se Selenium	v	Zn
Sample Collection Date 10/18/2011	Lab # K1110337-013A	As Arsenic 34	Be Beryllium 0.28	Cd Cadmium 64	Cr Chromium 44	Pb Lead 870	Hg Mercury 3.9	Ni Nickel 33	Se Selenium 1.4	V Vanadium 32	Zn Zinc 6600
Sample Collection Date 10/18/2011 10/18/2011	Lab # K1110337-013A K1110337-014A	As Arsenic 34 33	Be Beryllium 0.28 0.33	Cd Cadmium 64 240	Cr Chromium 44 95	Pb Lead 870 1600	Hg Mercury 3.9 4.5	Ni Nickel 33 28	Se Selenium 1.4 1.3	V Vanadium 32 35	Zn Zinc 6600 4400
Sample Collection Date 10/18/2011 10/18/2011 10/19/2011	Lab # K1110337-013A K1110337-014A K1110337-015A	As Arsenic 34 33 32	Be Beryllium 0.28 0.33 0.39	Cd Cadmium 64 240 46	Cr Chromium 44 95 58	Pb Lead 870 1600 830	Hg Mercury 3.9 4.5 2.3	Ni Nickel 33 28 50	Se Selenium 1.4 1.3 1.4	V Vanadium 32 35 33	Zn Zinc 6600 4400 3900
Sample Collection Date 10/18/2011 10/18/2011 10/19/2011 10/20/2011 10/20/2011	Lab # K1110337-013A K1110337-014A K1110337-015A K1110337-016A	As Arsenic 34 33 32 36	Be Beryllium 0.28 0.33 0.39 0.41	Cd Cadmium 64 240 46 58	Cr Chromium 44 95 58 61	Pb Lead 870 1600 830 880	Hg Mercury 3.9 4.5 2.3 4.3	Ni Nickel 33 28 50 38	Se Selenium 1.4 1.3 1.4 2	V Vanadium 32 35 33 36	Zn Zinc 6600 4400 3900 5000
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/20/2011 10/21/2011	Lab # K1110337-013A K1110337-015A K1110337-015A K1110337-016A K1110337-018A K1110337-018A K1110337-019A	As Arsenic 34 33 32 36 39	Be Beryllium 0.28 0.33 0.39 0.41 0.34	Cd Cadmium 64 240 46 58 92	Cr Chromium 44 95 58 61 59	Pb Lead 870 1600 830 880 1100	Hg Mercury 3.9 4.5 2.3 4.3 13	Ni Nickel 33 28 50 38 42	Se Selenium 1.4 1.3 1.4 2 1.9	V Vanadium 32 35 35 33 36 28	Zn Zinc 6600 4400 3900 5000 6900
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/21/2011 10/21/2011	Lab # K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-017A K1110337-019A K1110337-019A	As Arsenic 34 33 32 36 39 29	Be Beryllium 0.28 0.33 0.39 0.41 0.34 0.32	Cd Cadmium 64 240 46 58 92 72	Cr Chromium 44 95 58 61 59 54	Pb Lead 870 1600 830 880 1100 1000	Hg Mercury 3.9 4.5 2.3 4.3 13 11	Ni Nickel 33 28 50 38 42 34	Se Selenium 1.4 1.3 1.4 2 1.9 1.6	V Vanadium 32 35 33 36 28 32	Zn Zinc 6600 4400 3900 5000 6900 5300
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/20/2011 10/21/2011 10/21/2011	Lab # K1110337-013A K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-019A K1110337-019A K1110337-020A K1110337-021A	As Arsenic 34 33 32 36 39 29 29 28 35 26	Be Beryllium 0.28 0.33 0.39 0.41 0.34 0.32 0.33 0.41 0.52	Cd Cadmium 64 240 46 58 92 72 62	Cr Chromium 44 95 58 61 59 54 54 52	Pb Lead 870 1600 830 880 1100 1000 890	Hg Mercury 3.9 4.5 2.3 4.3 13 11 5.4	Ni Nickel 33 28 50 38 42 34 29	Se Selenium 1.4 1.3 1.4 2 1.9 1.6 4.1	V Vanadium 32 35 33 36 28 32 28	Zn Zinc 6600 4400 3900 5000 6900 5300 6300
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/20/2011 10/21/2011 10/21/2011	Lab # K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-017A K1110337-019A K1110337-019A	As Arsenic 34 33 32 36 39 29 28 35	Be Beryllium 0.28 0.33 0.39 0.41 0.34 0.32 0.33 0.41	Cd Cadmium 64 240 46 58 92 72 62 88	Cr Chromium 44 95 58 61 59 54 52 48	Pb Lead 870 1600 830 880 1100 1000 890 1500	Hg Mercury 3.9 4.5 2.3 4.3 13 11 5.4 7	Ni Nickel 33 28 50 38 42 34 29 26	Se Selenium 1.4 1.3 1.4 2 1.9 1.6 4.1 2.7	V Vanadium 32 35 33 36 28 32 28 32 28 30	Zn Zinc 6600 4400 3900 5000 6900 5300 6300 5300
Sample Collection Date 10/18/2011 10/18/2011 10/19/2011 10/20/2011 10/20/2011 10/21/2011 10/21/2011 10/26/2011	Lab # K1110337-013A K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-019A K1110337-019A K1110337-020A K1110337-021A	As Arsenic 34 33 32 36 39 29 28 35 26 43	Be Beryllium 0.28 0.33 0.39 0.41 0.32 0.33 0.33 0.41 0.52 0.27	Cd Cadmium 64 240 46 58 92 72 62 88 35 75	Cr Chromium 44 95 58 61 59 54 52 48 59 41	Pb Lead 870 1600 830 880 1100 1000 890 1500 690 960	Hg Mercury 3.9 4.5 2.3 4.3 13 11 5.4 7 3.2 3.7	Ni Nickel 33 28 50 38 42 34 29 26 45 28	Se Selenium 1.4 1.3 1.4 2 1.9 1.6 4.1 2.7 1.3 1.8	V Vanadium 32 35 33 36 28 32 28 30 33 32 32	Zn Zinc 6600 4400 3900 5000 6900 5300 6300 5800 4000
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/21/2011 10/21/2011 10/26/2011 10/26/2011	Lab # K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-017A K1110337-019A K1110337-019A K1110337-020A K1110337-021A K1110337-022A	As Arsenic 34 33 32 36 39 29 28 35 26 43 33.5	Be Beryllium 0.28 0.33 0.39 0.41 0.34 0.32 0.33 0.41 0.52 0.27	Cd Cadmium 64 240 46 58 92 72 62 88 35 75 83.2	Cr Chromium 44 95 58 61 59 54 52 48 59 41 57.1	Pb Lead 870 1600 830 880 1100 1000 890 1500 690 960	Hg Mercury 3.9 4.5 2.3 4.3 13 11 5.4 7 3.2 3.7 5.83	Ni Nickel 33 28 50 38 42 34 29 26 45 28 35.3	Se Selenium 1.4 1.3 1.4 2 1.9 1.6 4.1 2.7 1.3 1.8 1.95	V Vanadium 32 35 33 36 28 32 28 30 33 32 31.9	Zn Zinc 6600 4400 3900 5000 6900 5300 6300 5800 4000
Sample Collection Date 10/18/2011 10/19/2011 10/19/2011 10/20/2011 10/21/2011 10/21/2011 10/26/2011 10/26/2011 10/26/2011	Lab # K1110337-013A K1110337-014A K1110337-015A K1110337-016A K1110337-017A K1110337-019A K1110337-019A K1110337-020A K1110337-021A K1110337-022A	As Arsenic 34 33 32 36 39 29 28 35 26 43	Be Beryllium 0.28 0.33 0.39 0.41 0.32 0.33 0.33 0.41 0.52 0.27	Cd Cadmium 64 240 46 58 92 72 62 88 35 75	Cr Chromium 44 95 58 61 59 54 52 48 59 41	Pb Lead 870 1600 830 880 1100 1000 890 1500 690 960	Hg Mercury 3.9 4.5 2.3 4.3 13 11 5.4 7 3.2 3.7	Ni Nickel 33 28 50 38 42 34 29 26 45 28	Se Selenium 1.4 1.3 1.4 2 1.9 1.6 4.1 2.7 1.3 1.8	V Vanadium 32 35 33 36 28 32 28 30 33 32 32	Zn Zinc 6600 4400 3900 5000 6900 5300 6300 5300 6300 5800 4000 5400

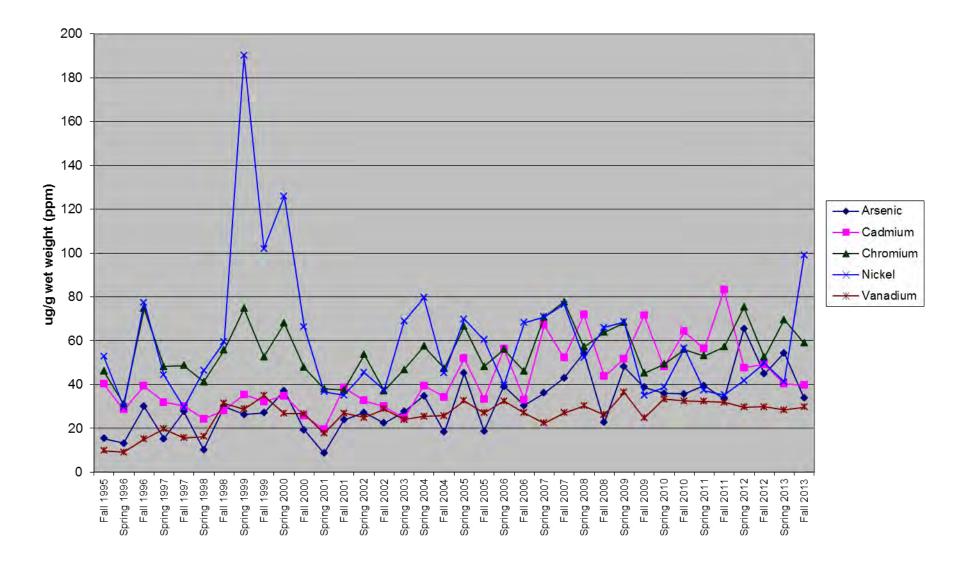
Sample											
Collection	Lab	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
6/12/2012	K1206354-001A	93	0.43	53	83	600	3	73	1.2	29	3800
6/12/2012	K1206354-002A	70	0.42	50	61	620	5	27	0.58	31	3400
6/13/2012	K1206354-003A	82	0.45	60	76	1100	3.5	35	0.92	26	4000
6/13/2012	K1206354-004A	60	0.44	45	66	420	2.5	42	0.84	29	3400
6/20/2012	K1206354-005A	42	1	29	43	830	1.8	37	0.71	26	2800
6/14/2012	K1206354-006A	53	0.38	59	53	1200	4.7	23	1.6	25	3600
6/15/2012	K1206354-007A	46	0.59	27	77	2000	2.5	53	0.87	45	3400
6/12/2012	K1206354-008A	66	0.37	55	57	400	4.8	27	1.6	32	4700
6/19/2012	K1206354	75	0.39	56	56	1300	3.2	25	1,4	28	4800
6/19/2012	K1206354-010A	68	0.42	45	180	1200	2.6	76	1	26	7400
										- · · · · · · · · · · ·	
Average		65.5	0.5	47.9	75.2	967.0 [°]	3.4	41.8	1.1	29.7	4130.0
							4.4	19.5	0.4	5.9	1301.3
Standard Devia	ation	15.9	0.2	11.7	38.8	494.3	1.1	19.5	0.4	0.9	
		15.9 24.2%	0.2 38.8%	11.7 24.4%	38.8 51.6%	494.3 51.1%	33.2%	46.6%	33.7%	19.7%	31.5%
Standard Devia											
Standard Devia			38.8%	24.4%	51.6%	51.1%		46.6%	33.7%	19.7%	31.5%
Standard Devia Coefficient of v Sample Collection	rariation Lab		38.8% Be	24.4% Cd	51.6% Cr	51.1% Pb	33.2% Hg	46.6% Ni	33.7%	19.7% V	31.5% Zn
Standard Devia Coefficient of v Sample Collection Date	Lab #	24.2% As Arsenic	38.8% Be Beryllium	24.4% Cd Cadmium	51.6% Cr Chromium	51.1% Pb Lead	33.2% Hg Mercury	46.6% Ni Nickel	33.7% Se Selenium	19.7% V Vanadium	31.5% Zn Zinc
Standard Devia Coefficient of v Sample Collection Date 9/25/2012	Lab # K1210235-001A	24.2% As Arsenic 65	38.8% Be Beryllium 0.38	24.4% Cd Cadmium 48	51.6% Cr Chromium 50	51.1% Pb Lead 1000	33.2% Hg Mercury 2.4	46.6% Ni Nickel 45	33.7% Se Selenium 0.64	V V Vanadium 28	31.5% Zn Zinc 5,000
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012	Lab # K1210235-001A K1210235-002A	24.2% As Arsenic 65 30	38.8% Be Beryllium 0.38 0.36	24.4% Cd Cadmium 48 28	51.6% Cr Chromium 50 47	51.1% Pb Lead 1000 490	33.2% Hg Mercury 2.4 1.9	46.6% Ni Nickel 45 37	33.7% Se Selenium 0.64 2.7	19.7% V Vanadium 28 25	31.5% Zn Zinc 5,000 2900
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012	Lab # K1210235-001A K1210235-002A K1210235-003A	24.2% As Arsenic 65 30 39	38.8% Be Beryllium 0.38 0.36 0.4	24.4% Cd Cadmium 48 28 34	51.6% Cr Chromium 50 47 46	51.1% Pb Lead 1000 490 480	33.2% Hg Mercury 2.4 1.9 1.6	46.6% Ni Nickel 45 37 68	33.7% Se Selenium 0.64 2.7 0.5	19.7% V Vanadium 28 25 38	31.5% Zn Zinc 5,000 2900 3400
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-004A	24.2% As Arsenic 65 30 39 41	38.8% Be Beryllium 0.38 0.36 0.4 0.39	24.4% Cd Cadmium 48 28 34 58	51.6% Cr Chromium 50 47 46 52	51.1% Pb Lead 1000 490 480 1500	Hg Mercury 2.4 1.9 1.6 4.2	46.6% Ni Nickel 45 37 68 29	33.7% Se Selenium 0.64 2.7 0.5 0.5	V Vanadium 28 25 38 30	31.5% Zn Zinc 5,000 2900 3400 5000
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-004A K1210235-005A	24.2% As Arsenic 65 30 39 41 41	38.8% Be Beryllium 0.38 0.36 0.4 0.39 0.34	24.4% Cd Cadmium 48 28 34 58 54	51.6% Cr Chromium 50 47 46 52 49	51.1% Pb Lead 1000 490 480 1500 660	Hg Mercury 2.4 1.9 1.6 4.2 2.7	46.6% Ni Nickel 45 37 68 29 29	33.7% Se Selenium 0.64 2.7 0.5 0.5 1.4	19.7% V Vanadium 28 25 38 30 23	31.5% Zn Zinc 5,000 2900 3400 5000 6400
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-004A	24.2% As Arsenic 65 30 39 41	38.8% Be Beryllium 0.38 0.36 0.4 0.39	24.4% Cd Cadmium 48 28 34 58	51.6% Cr Chromium 50 47 46 52	51.1% Pb Lead 1000 490 480 1500	Hg Mercury 2.4 1.9 1.6 4.2	46.6% Ni Nickel 45 37 68 29	33.7% Se Selenium 0.64 2.7 0.5 0.5	V Vanadium 28 25 38 30	31.5% Zn Zinc 5,000 2900 3400 5000
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012 10/3/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-005A K1210235-005A K1210235-006A	24.2% As Arsenic 65 30 39 41 41 41 44	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.34 0.4	24.4% Cd Cadmium 48 28 34 58 54 61	51.6% Cr Chromium 50 47 46 52 49 48	51.1% Pb Lead 1000 490 480 1500 660 1200	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4	46.6% Ni Nickel 45 37 68 29 29 29 28	33.7% Se Selenium 0.64 2.7 0.5 0.5 1.4 1.1	19.7% V Vanadium 28 25 38 30 23 23 26	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012 10/3/2012 10/3/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-004A K1210235-006A K1210235-006A K1210235-007A	24.2% As Arsenic 65 30 39 41 41 41 44 48	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.4 0.4 0.51	24.4% Cd Cadmium 48 28 34 58 54 61 64	51.6% Cr Chromium 50 47 46 52 49 48 74	Pb Lead 1000 490 480 1500 660 1200 1100	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4 3.7	46.6% Ni Nickel 45 37 68 29 29 29 28 82	Se Selenium 0.64 2.7 0.5 0.5 1.4 1.1 0.65	V Vanadium 28 25 38 30 23 26 34	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800 5100
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012 10/3/2012 10/4/2012 10/5/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-004A K1210235-005A K1210235-006A K1210235-007A K1210235-007A	24.2% As Arsenic 65 30 39 41 41 41 44 48 43	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.4 0.51 0.4	24.4% Cd Cadmium 48 28 34 58 54 61 64 48	51.6% Cr Chromium 50 47 46 52 49 48 74 52	51.1% Pb Lead 1000 490 480 1500 660 1200 1100 1000	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4 3.7 1.4	46.6% Ni Nickel 45 37 68 29 29 29 29 28 82 95	Se Selenium 0.64 2.7 0.5 0.5 1.4 1.1 0.65 0.59	V Vanadium 28 25 38 30 23 23 26 34 30	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800 5100 17000
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012 10/3/2012 10/4/2012 10/5/2012 10/5/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-005A K1210235-005A K1210235-006A K1210235-008A K1210235-008A K1210235-008A	24.2% As Arsenic 65 30 39 41 41 44 48 43 65 33	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.4 0.51 0.4 0.39 0.35	24.4% Cd Cadmium 48 28 34 58 54 61 64 48 62 34	51.6% Cr Chromium 50 47 46 52 49 48 74 52 53 53 53	51.1% Pb Lead 1000 490 480 1500 660 1200 1100 1000 470	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4 3.7 1.4 6.4 4	46.6% Ni Nickel 45 37 68 29 29 29 28 82 95 52 33	Se Selenium 0.64 2.7 0.5 0.5 1.4 1.1 0.65 0.59 1.2 0.5	V Vanadium 28 25 38 30 23 26 34 30 34 30 34 30	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800 5100 17000 5200 3200
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/27/2012 10/2/2012 10/2/2012 10/3/2012 10/4/2012 10/5/2012 10/5/2012 10/6/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-003A K1210235-005A K1210235-006A K1210235-007A K1210235-009A K1210235-009A K1210235-010A	24.2% As Arsenic 65 30 39 41 41 41 44 48 43 65 33 44.9	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.4 0.51 0.4 0.39 0.35	24.4% Cd Cadmium 48 28 34 58 54 61 64 61 64 48 62 34 34 49.1	51.6% Cr Chromium 50 47 46 52 49 48 74 52 53 53 53 53	51.1% Pb Lead 1000 490 480 1500 660 1200 1100 1000 1100 470 900	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4 3.7 1.4 6.4 4 3.27	46.6% Ni Nickel 45 37 68 29 29 29 29 28 82 95 52 33 33	Se Selenium 0.64 2.7 0.5 1.4 1.1 0.65 0.59 1.2 0.5 1.0	V Vanadium 28 25 38 30 23 26 34 30 34 30 34 30 34 30	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800 5100 17000 5200 3200
Standard Devia Coefficient of v Sample Collection Date 9/25/2012 9/26/2012 9/26/2012 10/2/2012 10/2/2012 10/3/2012 10/4/2012 10/5/2012 10/5/2012	Lab # K1210235-001A K1210235-002A K1210235-003A K1210235-003A K1210235-005A K1210235-006A K1210235-007A K1210235-009A K1210235-009A K1210235-010A	24.2% As Arsenic 65 30 39 41 41 41 44 48 43 65 33	Be Beryllium 0.38 0.36 0.4 0.39 0.34 0.4 0.51 0.4 0.39 0.35	24.4% Cd Cadmium 48 28 34 58 54 61 64 48 62 34	51.6% Cr Chromium 50 47 46 52 49 48 74 52 53 53 53	51.1% Pb Lead 1000 490 480 1500 660 1200 1100 1000 470	Hg Mercury 2.4 1.9 1.6 4.2 2.7 4.4 3.7 1.4 6.4 4	46.6% Ni Nickel 45 37 68 29 29 29 28 82 95 52 33	Se Selenium 0.64 2.7 0.5 0.5 1.4 1.1 0.65 0.59 1.2 0.5	V Vanadium 28 25 38 30 23 26 34 30 34 30 34 30	31.5% Zn Zinc 5,000 2900 3400 5000 6400 4800 5100 17000 5200 3200

Analysis performed by Life Science Laboratories, Inc.

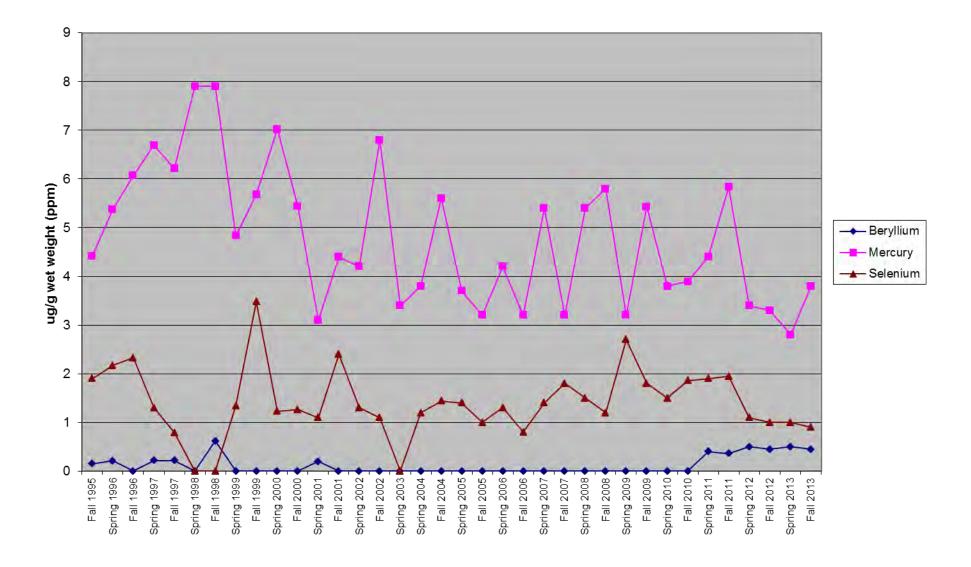
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					2013 ASH I	METAL ANA	ALYSES					
				ALL R	ESULTS IN	UG/G (ppm) - Wet Weig	ght				
O a marcha												
Sample	l -h	A -	D -	01	0.	D -		N. II.	0-		7	
Collection Date	Lab #	As Arsenic	Be	Cd Cadmium	Cr Chromium	Pb Lead	Hg	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc	
Dale	#	Arsenic	Beryllium	Caumum	Chromium	Leau	Mercury	INICKEI	Selenium	Vanaulum	ZINC	
6/11/2013	K1306243-001A	47	0.54	36	61	950	2.3	37	1.1	27	3500	
6/12/2013	K1306243-002A	53	0.55	44	59	1300	3.7	27	1.4	26	4100	
6/12/2013	K1306243-003A	44	0.48	33	59	610	2.5	25	0.68	24	3900	
6/13/2013	K1306243-004A	42	0.55	30	74	430	1.8	37	0.5	39	3200	l
6/13/2013	K1306243-005A	51	0.45	40	59	610	2.2	31	1.1	24	4600	
6/14/2013	K1306243-006A	54	0.43	37	52	610	3.3	24	1	25	3200	ĺ
6/18/2013	K1306243-007A	59	0.36	49	52	600	2.5	24	1.4	25	3900	
6/18/2013	K1306243-008A	48	0.48	38	67	630	2.5	58	1	32	3100	
6/19/2013	K1306243-009A	77	0.36	42	82	820	3.4	51	0.65	29	3500	
6/19/2013	K1306243-010A	69	0.46	54	130	1100	4.1	98	1.5	33	4200	
			<u> </u>									
Verage		54.4	0.5	40.3	69.5	766.0	2.8	41.2	1.0	28.4	3720.0	
Standard Devi	ation	11.1	0.1	7.3	23.2	271.9	0.7	23.1	0.3	4.9	498.4	
Coefficient of	variation	20.5%	15.0%	18.0%	33.4%	35.5%	26.3%	56.1%	33.1%	17.3%	13.4%	
												,
Sample												
Collection	Lab	As	Be	Cd	Cr	Pb	Hg	Ni	Se	V	Zn	
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc	
11/4/2013	K1311221-001A	42	0.36	42	51	1400	3.1	33	0.82	36	4200	
11/4/2013	K1311221-002A	41	0.41	46	50	560	3.3	28	0.9	35	4600	
11/5/2013 11/5/2013	K1311221-003A K1311221-004A	37	0.33 0.34	49 45	48 91	830 1200	3.7 2.7	30 301	1.2 1.1	23 26	4200	
11/5/2013	K1311221-004A K1311221-005A	24	0.34	45 31	91 60	1200 550	3.3	301 120	1.1 0.5	26 28	4000 2900	}
11/6/2013	K1311221-005A K1311221-006A	41	0.37	50	72	560	3.3	79	1.1	28	4700	
	K1311221-000A	25	0.36	32	48	860	3.3	260	0.73	23	3200	
11/13/2013	K1311221-007A	36	0.30	44	40 50	910	5.8	40	1.3	20	4200	
11/14/2013	K1311221-009A	28	0.45	28	53	450	3.2	50	0.59	30	3300	
11/14/2013	K1311221-010A	26	0.42	29	66	420	6.5	50	0.63	35	3500	
			<u>.</u>							<u> </u>		,
Average		33.7	0.45	39.6	58.9	774	3.8	99.1	0.9	29.7	3880	ĺ
Standard De	eviation	7.2	0.0	8.6	13.9	329.0	1.3	100.0	0.3	4.3	616.1	
Coefficient c	f variation	21.3%	9.7%	21.8%	23.7%	42.5%	33.5%	100.9%	31.3%	14.6%	15.9%	
Analysis pe	formed by Life	Science La	boratories, I	nc.								

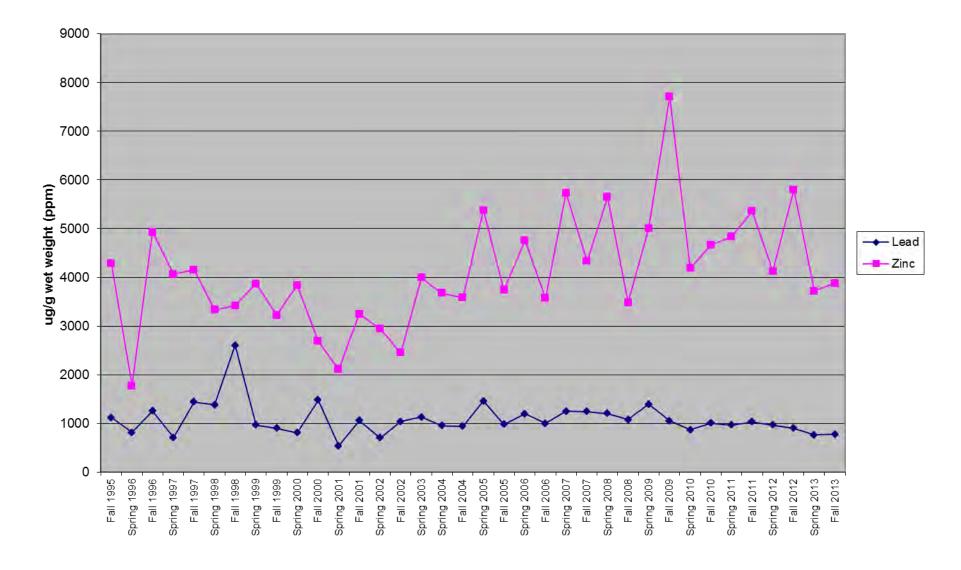
VI.A. Mean Values Ash Data Wet Weight



VI.B. Mean Values Ash Data Wet Weight



VI.C. Mean Values Ash Data Wet Weight



SAMPLE											
COLLECTION	LAB	As	Be	Cd	Cr	Рb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
10/26/98	980808	34.2	0.92	30.6	54.8	979	7.99	57.3	<1.14	37.9	4090
10/26/98	980809	29.9	0.66	33.4	59.6	982	8.10	52.7	<1.27	40.0	4970
10/27/98	980810	46.8	0.96	36.4	180	1840	8.96	259	<3.21	47.0	4630
10/27/98	980811	31.6	0.83	39.9	61.6	18500	8.60	50.2	<1.23	32.9	5030
10/28/98	980812	42.7	0.84	39.7	55.4	1980	10.4	42.5	<1.27	39.9	4300
10/28/98	980813	36.2	0.70	46.2	83.1	1880	11.4	97.3	<1.53	47.8	5720
10/29/98	980814	49.8	0.85	43.7	82.2	1310	12.1	71.1	<1.31	42.1	1880
10/29/98	980815	41.4	0.92	40.5	59.8	3510	18.7	22.6	<1.31	35.1	5050
10/30/98	980816	36.8	0.65	28.2	45.8	914	9.04	50.7	<3.10	51.4	3840
10/30/98	980817	39.2	0.65	28.3	44.3	1410	7.87	74.4	<1.28	35.1	4990
		38.9	0.80	36.7	72.7	3331	10.3	77.8	N/A	40.9	4450
TANDARD DEVI		6.1	0.12	6.0	37.8	5108	3.1	63.3	N/A	5.8	1002
OEFFICIENT OF	- VARIATION	<u>15.7%</u>	14.7%	16.4%	52%	153.4%	30.2%	81%	N/A	14.2%	22.5%

.

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
04-19-99	990215	38.0	<0.62	36.8	62.6	950	5.70	91.2	1.60	38.6	3580
04-19-99	990216	25.5	<0.56	36.8	128.0	2090	4.30	38.1	1.30	41.0	10700
04-20-99	990217	34.6	<0.66	39.1	62.6	970	5.10	82.8	1.70	43.0	3640
04-20-99	990218	26.0	<0.61	42.7	61.3	815	7.00	<u>39.8</u>	1.70	25.0	3650
04-21-99	990219	36.2	<0.63	45.8	65.0	1120	7.30	1910.0	1.90	35.0	4890
04-21-99	990220	39.0	<0.65	58.2	299.0	1090	6.90	57.9	2.30	42.5	5010
04-22-99	990221	29.7	<0.61	43.6	54.9	1270	5.10	48.2	1.10	38.9	3600
04-22-99	990222	37.2	<0.68	54.0	80.5	1560	7.00	42.7	1.60	32.8	4670
04-23-99	990223	37.7	<0.62	50.2	64.5	1060	6.00	36.6	2.10	37.5	4200
04-23-99	990224	31.1	<0.64	43.6	68.9	1220	7.20	55.9	1.70	30.4	4290
		33.5	N/A	45.1	94.7	1215	6.16	240	1.70	36.5	4823
STANDARD DEVI		4.8	N/A	6.8	70.9	350	1.01	557	0.33	5.4	2027
COEFFICIENT OF	VARIATION	14.3%	N/A	15.1%	74.8%	28.8%	16.5%	231.7%	19.5%	14.9%	42.0%

Analyses performed by ELS.

11-08-99	990747	37.5	<3.2	37.9	76.1	999	7.25	305.0	<3.2	46.8	4020
11-08-99	990748	43.5	<3.6	42.6	68.5	1130	7.71	378.0	4.90	43.1	4650
11-09-99	990749	43.5	<3.2	41.4	70.2	1350	6.18	85.1	<3.2	63.9	4130
11-09-99	990750	30.4	<3.1	40.6	76.1	883	6.88	61.9	<3.1	43.8	3700
11-10-99	990751	33.6	<3.3	40,7	85.6	1130	6.01	80.0	<3.3	53.8	4410
11-10-99	990752	34.4	<3.3	48.3	69.0	1900	7.06	58.2	<3.3	36.0	4510
11-11-99	990753	36,2	<3.1	40.0	58.6	1190	6.57	48.9	<3.1	61.6	3900
11-11-99	990754	33.4	<3.3	45.6	67.6	1200	10.20	59.0	<3.3	41.2	
11-12-99	990755	32.6	<3.4	38.2	69.4	972	8.64	54.8	<3.4		4680
11-12-99	990756	33.4	<3.2	51.1	55.8	1210	9.01	225.0	< <u>3.</u> 4 <3.2	40.1	<u>3810</u>
							1 0.01	220.0		32.6	5020
VERAGE		35.9	N/A	42.6	69.7	1196	7.55	100	1.00		·
TANDARD DEV	ATION	4.2	N/A	4.1				136	4.90	46.3	4283
OEFFICIENT OF	VARIATION	11.8%	N/A		8.1	267	1.28	115	0.00	9.9	413
		1.070		9.7%	11.6%	22.4%	16.9%	<u>84.9%</u>	0.0%	21.3%	9.6%

COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic	Beryllium		Chromium		Mercury	Nickel		v Vanadium	Zinc
05/08/00	2000-0243	49.7	<0.63	45.5	75.4	1350	9.00	130.0	1.50	42.2	4000
05/08/00	2000-0244	34.1	<0.60	41.5	75.9	843	6.40	69.3	1.40	29.9	4030
05/09/00	2000-0245	91.8	<0.63	48.3	82.4	1390	10.70	309.0	3.30	<u> </u>	6970
05/09/00	2000-0246	32.3	<0.65	40.3	119.0	976	8.00	151.0	1.20	29.6	4720
05/10/00	2000-0247	39.9	<0.33	43.5	72.6	901	7.90	51.7	1.20	30.4	7590
05/10/00	2000-0248	32.9	<0.62	43.1	76.8	990	8.20	59.0	1.40	28.5	3680
05/11/00	2000-0249	66.4	<0.62	48.8	131.0	891	12.80	358.0	1.90	39.4	3800
05/11/00	2000-0250	43.4	<0.64	41.6	66.2	1090	7.30	38.0	<0.64	<u> </u>	<u>3800</u> 5070
05/12/00	2000-0251	32.3	<0.62	36.3	70.3	853	9.60	357.0	1.70	33.4	4620
05/12/00	2000-0252	46.8	<0.67	51.6	89.8	1010	9.00	56.4	1.90	34.7	4210
							0.00 1	00.4	1.00	34.7	4210
AVERAGE STANDARD DEV	(A.T.O.)	47.0	NA	44.1	85.9	1029	8.89	158	1.55	33.9	4869
		10 A 1	1 KFA F								
	EVADIATION	18.0	NA	4.3	20.6	185	1.73	125	0.78	4.7	1280
COEFFICIENT O	F VARIATION	38.4%	NA NA	4.3 9.8%	20.6	185 18.0%	<u> </u>	125 79.3%	0.78 50.1%	<u>4.7</u> 13.7%	1280 26.3%
COEFFICIENT O	F VARIATION	38.4%	NA	9.8%	24.0%	18.0%	the second s	the second s			
COEFFICIENT O Analyses performed b 12/10/00	F VARIATION by ELS. 2000-0785	38.4% 35.6	NA <0.65	9.8% 36.0	24.0% 54.1		the second s	the second s			
COEFFICIENT O Analyses performed b 12/10/00 12/11/00	F VARIATION by ELS. 2000-0785 2000-0786	38.4% 35.6 19.5	NA <0.65 <0.61	9.8% 36.0 23.1	24.0%	18.0%	19.5%	79.3%	50.1%	13.7%	26.3%
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787	38.4% 35.6 19.5 31.2	NA <0.65 <0.61 <0.66	9.8% 36.0	24.0% 54.1	18.0% 1300	19.5%	79.3% 42.0	50.1%	13.7% 57.0	26.3% 4010 2350
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00 12/12/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788	38.4% 35.6 19.5 31.2 28.9	NA <0.65 <0.61	9.8% 36.0 23.1	24.0% 54.1 48.3	18.0% 1300 826	19.5% 12.00 6.71	79.3% 42.0 36.2	50.1% 1.40 1.20	13.7% 57.0 27.8 49.5	26.3% 4010 2350 3590
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00 12/12/00 12/12/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789	38.4% 35.6 19.5 31.2	NA <0.65 <0.61 <0.66	9.8% 36.0 23.1 35.5	24.0% 54.1 48.3 66.2	18.0% 1300 826 990	19.5% 12.00 6.71 5.09	79.3% 42.0 36.2 60.0 52.1	50.1% 1.40 1.20 1.80 1.60	13.7% 57.0 27.8 49.5 36.1	26.3% 4010 2350 3590 4050
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00 12/12/00 12/12/00 12/13/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789 2000-0790	38.4% 35.6 19.5 31.2 28.9	NA <0.65 <0.61 <0.66 <0.68	9.8% 36.0 23.1 35.5 42.7	24.0% 54.1 48.3 66.2 63.1	18.0% 1300 826 990 861	19.5% 12.00 6.71 5.09 6.72 5.84	79.3% 42.0 36.2 60.0 52.1 419.0	50.1% 1.40 1.20 1.80 1.60 1.80	13.7% 57.0 27.8 49.5 36.1 26.9	26.3% 4010 2350 3590 4050 4840
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/12/00 12/12/00 12/12/00 12/13/00 12/13/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789	38.4% 35.6 19.5 31.2 28.9 19.1	NA <0.65 <0.61 <0.66 <0.68 <0.67	9.8% 36.0 23.1 35.5 42.7 36.2	24.0% 54.1 48.3 66.2 63.1 92.6	18.0% 1300 826 990 861 1080 1160	19.5% 12.00 6.71 5.09 6.72 5.84 7.50	79.3% 42.0 36.2 60.0 52.1 419.0 64.6	50.1% 1.40 1.20 1.80 1.60 1.80 1.80	13.7% 57.0 27.8 49.5 36.1 26.9 38.4	26.3% 4010 2350 3590 4050 4840 3560
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00 12/12/00 12/12/00 12/13/00 12/13/00 12/13/00 12/14/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789 2000-0790	38.4% 35.6 19.5 31.2 28.9 19.1 20.2	NA <0.65 <0.61 <0.66 <0.68 <0.67 <0.68	9.8% 36.0 23.1 35.5 42.7 36.2 35.9	24.0% 54.1 48.3 66.2 63.1 92.6 68.0 69.6	18.0% 1300 826 990 861 1080 1160 938	19.5% 12.00 6.71 5.09 6.72 5.84 7.50 8.31	79.3% 42.0 36.2 60.0 52.1 419.0 64.6 38.1	50.1% 1.40 1.20 1.80 1.60 1.80 1.60	13.7% 57.0 27.8 49.5 36.1 26.9 38.4 24.2	26.3% 4010 2350 3590 4050 4840 3560 2960
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/12/00 12/12/00 12/13/00 12/13/00 12/13/00 12/14/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789 2000-0790 2000-0791	38.4% 35.6 19.5 31.2 28.9 19.1 20.2 19.6	NA <0.65 <0.61 <0.66 <0.68 <0.67 <0.68 <0.67	9.8% 36.0 23.1 35.5 42.7 36.2 35.9 36.1	24.0% 54.1 48.3 66.2 63.1 92.6 68.0 69.6 71.6	18.0% 1300 826 990 861 1080 1160 938 1160	19.5% 12.00 6.71 5.09 6.72 5.84 7.50 8.31 7.44	79.3% 42.0 36.2 60.0 52.1 419.0 64.6 38.1 64.2	50.1% 1.40 1.20 1.80 1.60 1.80 1.60 1.80 1.80	13.7% 57.0 27.8 49.5 36.1 26.9 38.4 24.2 35.3	26.3% 4010 2350 3590 4050 4840 3560 2960 2980
COEFFICIENT O Analyses performed b 12/10/00 12/11/00 12/11/00 12/12/00 12/12/00 12/13/00 12/13/00 12/13/00 12/14/00	F VARIATION by ELS. 2000-0785 2000-0786 2000-0787 2000-0788 2000-0789 2000-0790 2000-0791 2000-0792	38.4% 35.6 19.5 31.2 28.9 19.1 20.2 19.6 28.5	NA <0.65 <0.61 <0.66 <0.68 <0.67 <0.68 <0.67 <0.68 <0.67 <0.68	9.8% 36.0 23.1 35.5 42.7 36.2 35.9 36.1 32.4	24.0% 54.1 48.3 66.2 63.1 92.6 68.0 69.6	18.0% 1300 826 990 861 1080 1160 938	19.5% 12.00 6.71 5.09 6.72 5.84 7.50 8.31	79.3% 42.0 36.2 60.0 52.1 419.0 64.6 38.1	50.1% 1.40 1.20 1.80 1.60 1.80 1.60	13.7% 57.0 27.8 49.5 36.1 26.9 38.4 24.2	26.3% 4010 2350 3590 4050 4840 3560 2960

STANDARD DEVIATION	25.1	<u>NA</u>	33.6	62.6	1884	7.07	87	1.64	04 7		
COEFFICIENT OF ATTON	5.5	NA	5.3	13.8	2513	1 01	111	1.64	34.7	3492	
COEFFICIENT OF VARIATION	22.1%	NA	15.7%	22.0%	133.4%	27.40/		0.20	10.6	710	
A					100,470	27.1%	127.8%	11.9%	30.5%	20.3%	

SAMPLE COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic	Beryllium		Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
03/19/01	01-0167	11.3	0.3	28.2	55.7	860	3.15	50.1	0.86	25.5	2660
03/19/01	01-0168	8.3	0.490	20.1	67.6	1080	2.85	29.3	1.00	23.1	2450
03/20/01	01-0169	12.2	0.280	26.9	48.8	813	<u>5</u> .00	31.3	1.60	20.3	2230
03/20/01	01-0170	14.6	0.280	22.5	50.1	555	2.59	44.9	1.40	19.6	2190
03/21/01	01-0171	11.7	<0.19	23.0	33.7	458	4.10	32.2	1.30	15.3	2080
03/21/01	01-0172	10.6	0.340	26.8	46.0	574	5.63	36.7	1.70	27.0	6490
03/22/01	01-0173	15.5	0.350	41.4	87.8	746	4.73	96.0	1.20	31.4	2830
03/22/01	01-0174	8.3	0.370	22.2	45.1	511	4.72	63.6	1.20	26.9	2100
03/23/01	01-0175	11.4	<0.19	18.3	38.5	899	3.84	48.0	3.50	28.5	2680
03/23/01	01-0176	11.3	0.270	32.9	39.0	743	4.41	60.4	1.30	19.7	2690
									1.00	10.1	2030
		11.5	0.271	26.2	51.2	723.9	4.1	49.3	1.5	23.7	2840.0
STANDARD DEV		2.2	0.1	6.5	15.2	187.6	0.9	19.2	0.7	4.7	1244.0
COEPFICIENT O	FVARIATION	18.9%	19.7%	24.7%	29.7%	25.9%	22.9%	39.1%	46.9%	19.9%	43.8%
Analyses performed b	y ELS.										
<u>12/10/0</u> 1	01-0777	45.8	<0.65	58.3	42.8	3760	7.60	51.9	3.80	37.7	4880
12/10/01	01-0778	24.0	<0.64	33.6	39.6	672	7.80	27.7	1.90	32.2	3390
12/11/01	01-0779	28.8	<0.69	59.0	63.3	1200	9.30	49.4	2.80	31.0	4640
12/11/01	01-0780	27.2	<1.6	42.4	60.0	944	6.10	48.2	2.90	28.5	5040
12/12/01	01-0781	26.8	<0.69	37.3	53.9	799	5.60	64.8	3.70	41.7	
12/12/01	01-0782	30.7	<0.62	46.8	41.9	965	7.60	43.5	4.00		3800
12/13/01	01-0783	31.3	<0.63	50.6	38.4	815	6.60			28.8	4540
12/13/01	01-0784	32.1	< 0.69	46.6	44.9	1740		40.7	2.80	33.5	3890
12/14/01	01-0785	47.6	<0.71	104.0	49.9		2.80	53.3	2.90	28.1	3900
12/14/01	01-0786	18.7	<0.68			1660	2.70	38.5	4.10	40.4	5590
		10.7	-0.00	33.0	59.5	1480	1.80	44.3	2.20	53.8	3060

AVERAGE				·		-				
	31.3	NA	51.2	49.4	1403.5	58	46.2	24	05.0	10.00
STANDARD DEVIATION	8.6	NA	19.6	07	862.0	0.6		3.1	35.6	4273.0
COEFFICIENT OF VARIATION	27.3%	and the second	the second s	0.7	And the second se	2.4	<u>9.4</u>	0.7	7.7	752.2
	21.3%	NA	38.4%	17.7%	61.4%	41.6%	20.4%	23.1%	21.5%	the second s
							140.170	20.170	21.3%	17.6%

COLLECTION DATE	LAB #	As Arsenic	Be Bervllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
05/06/02	02-0241	30.7	<0.62	37.6	62.4	911	5.80	91.4	1.80	38.8	3310
05/06/02	02-0242	25.6	<0.64	29.0	57.5	732	2.80	79.5	1.50		
05/07/02	02-0243	47.3	< 0.61	52.0	55.6	937	5.50	47.3		31.3	3630
05/07/02	02-0244	27.1	<0.61	49.6	114.0	769	8.10		1.90	29.3	4300
05/08/02	02-0245	29.6	<0.67	57.3	79.0	1200		66.3	1.40	32.8	4010
05/08/02	02-0246	23.5	<0.65	30.5	66.8		7.70	70.2	2.00	38.0	5100
05/09/02	02-0247	37.0	<0.63	34.0		835	2.40	76.9	0.71	30.6	3100
05/09/02	02-0248	23.6	< 0.62		70.7	975	4.30	37.7	1.20	30.2	2760
05/10/02	02-0249	44.9	<0.65	<u>23.7</u> 42.4	<u>46.5</u> 55.1	751	2.90	35.6	1.20	23.4	2610
05/10/02	02-0250	57.4	<0.67	<u> </u>		912	7.50	35.3	2.40	31.3	3660
	01 0100	07.4	0.07		73.1	962	6.80	39.3	2.50	32.2	4990
AVERAGE		34.7	NA	41.6	68.1	898.4	5,4	58.0	1.7	31.8	3747.0
STANDARD DEV		11.0	NA	12.0	17.9	131.5	2.1	20.1	0.5	4.1	815.4
COEFFICIENT O	F VARIATION	31.8%	NA	28.7%	26.3%	14.6%	the second s				
		011070		20.176	20.070	14.0%	38.2%	34.7%	32.2%	13.0%	21.8%
Analyses performed by	y ELS.							34.7%	32.2%	13.0%	21.8%
Analyses performed by	y ELS. 02-0767	44.7	<1.34	57.6	60.9	14.0%	6.02	56.8	2.35	45.3	21.8% 5380
Analyses performed b 12/02/02 12/02/02	y ELS. 02-0767 02-0768	44.7 21.8	<1.34 <1.34	57.6 32.4					······································		
Analyses performed b 12/02/02 12/02/02 12/03/02	y ELS. 02-0767 02-0768 02-0769	44.7 21.8 27.6	<1.34	57.6	60.9	1310	6.02	56.8	2.35	45.3 38.2	5380 3020
Analyses performed b 12/02/02 12/02/02 12/03/02 12/03/02	y ELS. 02-0767 02-0768 02-0769 02-0770	44.7 21.8	<1.34 <1.34	57.6 32.4	60.9 46.8	<u>1310</u> 943	6.02 5.37	56.8 87.1	2.35 <1.34 1.26	45.3 38.2 35.1	5380 3020 2430
Analyses performed by <u>12/02/02</u> <u>12/02/02</u> <u>12/03/02</u> <u>12/03/02</u> <u>12/04/02</u>	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771	44.7 21.8 27.6	<1.34 <1.34 <1.21	57.6 32.4 28.9	60.9 46.8 36.6	1310 943 1060	6.02 5.37 10.80	56.8 87.1 31.5 33.7	2.35 <1.34 1.26 <1.45	45.3 38.2 35.1 82.1	5380 3020 2430 3880
Analyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02	y ELS. 02-0767 02-0768 02-0769 02-0770	44.7 21.8 27.6 24.7	<1.34 <1.34 <1.21 <1.45	57.6 32.4 28.9 39.1	60.9 46.8 36.6 47.9	1310 943 1060 868	6.02 5.37 10.80 8.80 6.47	56.8 87.1 31.5 33.7 49.4	2.35 <1.34 1.26 <1.45 2.11	45.3 38.2 35.1 82.1 31.1	5380 3020 2430 3880 3370
Analyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771	44.7 21.8 27.6 24.7 35.6	<1.34 <1.34 <1.21 <1.45 <0.68	57.6 32.4 28.9 39.1 40.4	60.9 46.8 36.6 47.9 57.7	1310 943 1060 868 2260 1820	6.02 5.37 10.80 8.80 6.47 19.90	56.8 87.1 31.5 33.7 49.4 55.6	2.35 <1.34 1.26 <1.45 2.11 2.19	45.3 38.2 35.1 82.1 31.1 30.9	5380 3020 2430 3880 3370 3170
Analyses performed by 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02 12/05/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772	44.7 21.8 27.6 24.7 35.6 33.6	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72	57.6 32.4 28.9 39.1 40.4 45.3	60.9 46.8 36.6 47.9 57.7 48.5 49.7	1310 943 1060 868 2260 1820 2230	6.02 5.37 10.80 8.80 6.47 19.90 12.20	56.8 87.1 31.5 33.7 49.4 55.6 54.4	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72	45.3 38.2 35.1 82.1 31.1 30.9 32.7	5380 3020 2430 3880 3370 3170 4220
Analyses performed by 12/02/02 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773	44.7 21.8 27.6 24.7 35.6 33.6 32.9	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72 <0.71	57.6 32.4 28.9 39.1 40.4 45.3 60.9	60.9 46.8 36.6 47.9 57.7 48.5 49.7 53.3	1310 943 1060 868 2260 1820 2230 1860	6.02 5.37 10.80 8.80 6.47 19.90 12.20 9.91	56.8 87.1 31.5 33.7 49.4 55.6 54.4 57.7	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72 2.11	45.3 38.2 35.1 82.1 31.1 30.9 32.7 32.5	5380 3020 2430 3880 3370 3170 4220 3340
Analyses performed by 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02 12/05/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774	44.7 21.8 27.6 24.7 35.6 33.6 32.9 30.6	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72 <0.71 <0.72	57.6 32.4 28.9 39.1 40.4 45.3 60.9 43.6 35.0	60.9 46.8 36.6 47.9 57.7 48.5 49.7 53.3 50.3	1310 943 1060 868 2260 1820 2230 1860 1320	6.02 5.37 10.80 8.80 6.47 19.90 12.20 9.91 8.52	56.8 87.1 31.5 33.7 49.4 55.6 54.4 57.7 39.3	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72 2.11 1.35	45.3 38.2 35.1 82.1 31.1 30.9 32.7 32.5 31.3	5380 3020 2430 3880 3370 3170 4220 3340 2700
Analyses performed by 12/02/02 12/03/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02 12/05/02 12/06/02 12/06/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775	44.7 21.8 27.6 24.7 35.6 33.6 32.9 30.6 28.6 20.1	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72 <0.71 <0.72 <0.63	57.6 32.4 28.9 39.1 40.4 45.3 60.9 43.6	60.9 46.8 36.6 47.9 57.7 48.5 49.7 53.3	1310 943 1060 868 2260 1820 2230 1860	6.02 5.37 10.80 8.80 6.47 19.90 12.20 9.91	56.8 87.1 31.5 33.7 49.4 55.6 54.4 57.7	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72 2.11	45.3 38.2 35.1 82.1 31.1 30.9 32.7 32.5	5380 3020 2430 3880 3370 3170 4220 3340
Analyses performed by 12/02/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02 12/05/02 12/06/02 12/06/02 XVERAGE	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775 02-0776	44.7 21.8 27.6 24.7 35.6 33.6 32.9 30.6 28.6 20.1 30.0	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72 <0.72 <0.72 <0.63 <0.63 NA	57.6 32.4 28.9 39.1 40.4 45.3 60.9 43.6 35.0 20.1 40.3	60.9 46.8 36.6 47.9 57.7 48.5 49.7 53.3 50.3 45.4 49.7	1310 943 1060 868 2260 1820 2230 1860 1320	6.02 5.37 10.80 8.80 6.47 19.90 12.20 9.91 8.52	56.8 87.1 31.5 33.7 49.4 55.6 54.4 57.7 39.3 36.3	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72 2.11 1.35 1.30	45.3 38.2 35.1 82.1 31.1 30.9 32.7 32.5 31.3 29.5	5380 3020 2430 3880 3370 3170 4220 3340 2700 1480
Analyses performed by 12/02/02 12/03/02 12/03/02 12/03/02 12/04/02 12/04/02 12/05/02 12/05/02 12/06/02 12/06/02	y ELS. 02-0767 02-0768 02-0769 02-0770 02-0771 02-0772 02-0773 02-0774 02-0775 02-0776 ATION	44.7 21.8 27.6 24.7 35.6 33.6 32.9 30.6 28.6 20.1	<1.34 <1.34 <1.21 <1.45 <0.68 <0.72 <0.71 <0.72 <0.63 <0.63	57.6 32.4 28.9 39.1 40.4 45.3 60.9 43.6 35.0 20.1	60.9 46.8 36.6 47.9 57.7 48.5 49.7 53.3 50.3 45.4	1310 943 1060 868 2260 1820 2230 1860 1320 322	6.02 5.37 10.80 8.80 6.47 19.90 12.20 9.91 8.52 3.31	56.8 87.1 31.5 33.7 49.4 55.6 54.4 57.7 39.3	2.35 <1.34 1.26 <1.45 2.11 2.19 2.72 2.11 1.35	45.3 38.2 35.1 82.1 31.1 30.9 32.7 32.5 31.3	5380 3020 2430 3880 3370 3170 4220 3340 2700

Analyses performed by ELS.

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Bervilium	Cd Cadmlum	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
08/02/03	15503164	18.0	<0.60	18.0	120.0	6500	1.60	270.0	<0.60	28.0	1700
06/02/03	15503165	25.0	<0.55	25.0	49.0	700	1.40	100.0	<0.55	29.0	15000
08/03/03	15503168	13,0	<0.57	16.0	23.0	1200	1.30	13.0	<0.57	12.0	1500
06/04/03	16103027	29.0	<0.65	33.0	40.0	910	3.20	130.0	<0.65	30.0	3800
06/04/03	16103028	19.0	<0.59	18.0	34.0	320	8.20	26.0	<0.59	14.0	1700
06/05/03	16103029	49.0	<0.66	44.0	62.0	870	5.10	47.0	<0.66	48.0	5100
06/05/03	16103030	42.0	<0.75	37.0	72.0	780	7.70	30.0	<0.75	31.0	3500
06/06/03	16103031	38.0	<0.63	38.0	54.0	750	4.30	50.0	<0.63	42.0	
06/06/03	16103032	45.0	<0.66	46.0	67.0	920	5.70	85.0	<0.66	28.0	<u>3500</u> 7200
06/07/03	16103026	71.0	<0.61	38.0	65.0	830	4.50	93.0	<0.61	39.0	5700
VERAGE		34.9		01.0	<u></u>	1000					
TANDARD DEVI	ATION	16.8	NA	31.3	58.6	1378.0	4.3	84.4	NA	30.1	4870.0
OEFFICIENT OF		40.1%	NA NA	10.6 34.0%	25.3 43.2%	1720.0 124.8%	2.4 _54.7%	71.3 84.5%	NA NA	10.7 35.5%	3809.7

Analyses performed by Upstate Laboratories inc.

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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
06/14/04	E1540	38.0	<1.2	31.0	53.0	980	3.60	47.0	1.00	32.0	4200
06/14/04	E1541	29.0	<1.1	25.0	48.0	730	1.40	28.0	0.83	23.0	2900
06/15/04	E1542	45.0	<1.2	33.0	78.0	1500	2.90	65.0	1.30	51.0	3600
06/15/04	E1543	51.0	<12	45.0	100.0	1100	7,70	120.0	<5.9	<59	4000
06/16/04	E2029	39,0	<1.2	45.0	62.0	1100	5.90	62.0	1.50	36.0	4300
06/16/05	E2030	40.0	<1.3	48.0	58.0	1300	3.90	410	2.60	29.0	5100
06/17/05	E2031	31.0	<1.2	39.0	67.0	790	4.30	44.0	1.50	30.0	4200
06/23/04	E2626	33.0	<1.2	38.0	68.0	970	4.60	43.0	2.20	30.0	3900
06/25/04	E2627	61.0	<1.3	98.0	85.0	1900	7.50	110.0	2.20	34.0	7800
06/27/04	E2628	54,0	<1.2	79.0	75.0	1200	3.90	58.0	2.10	42.0	4500
AVERAGE		T							······		
STANDARD DEVI	ATION	42.1	NA	48.1	69,4	1157.0	4.6	98.7	1.5	30.7	4470.0
COEFFICIENT OF		10.0	NA	21.7	14.8	328.9	1.9	107.4	0.7	12.6	1229.7
JOEFFICIENT OF	VARIATION	23.7%	NA	45.1%	21.4%	28.4%	40.9%	108.6%	48.8%	41.0%	27.5%

Analyses performed by O' Brien & Gere Laboratories, Inc.

SAMPLE COLLECTION DATE	LAB	As Arsenic	Be Beryllum	Cd Cadmlum	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Seleptum	V Vanadium	Zn Zinc
12/23/04	F1433	19.0	<1.3	36.0	44.0	730	5.50	37.0	0.93	28.0	
12/23/04	<u>F</u> 1434	23	<1.3	47.0	65.0	2500	7.10	37.0	1.50		5100
12/27/04	F1513	27.0	<1.1	44.0	50.0	1200	16.00	44.0	1.00	28.0	4600
12/27/04	F1514	25.0	<1.2	35.0	59.0	820	9.10	130.0	1.80	42.0	4600
12/28/04	F1515	20.0	<1.3	40.0	100.0	1500	6.10	45.0		30.0	6000
12/28/04	F1516	25.0	<1.4	50.0	67.0	860	5.80		1.00	44.0	4100
12/29/04	F1517	23.0	<1.2	41.0	48.0	1000		98.0	1.40	24.0	4400
12/29/04	F1518	27.0	<1.3	53.0	65.0		4.30	35.0	1.20	41.0	3900
12/30/04	F1519	18.0	<1.2	43.0		1800	5,70	58.0	1.60		
12/30/04	F1520	23.0	<1.2		41.0	770	6.00	34.0	1.00	23.0	3600
		20.0	<u> </u>	43.0	64.0	790	4.20	<u>5</u> 6.0	1.70	28.0	4300
ÆRAGE		23.0	NA	43.2	60.3	1197.0	7.0	57.4			
ANDARD DEVIA	TION	3.0	NÁ	5.4	18.1	549.0	3.3	30.2	1.3 0.3	32.4	4520.0
DEFFICIENT OF	VARIATION	13.0%	NA	12,5%	26.6%	45.9%	47.0%	52,7%	23.7%	22.6%	<u>633.7</u> 14.0%

Analyses performed by O' Brien & Gare Laboratories, Inc

SAMPLE							1		<u> </u>		
COLLECTION	LAB	As	Be	Cđ	Cr	Pb	Hg	Ni	Se	l v l	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	
05/16/05	0505100-001A	51.0	<1.1	51.0	64.0	1700	4.00	43.0	1.50	52.0	6200
05/16/05	0505100-002A	56.0	<1.2	49.0	74.0	1300	4.30	49.0	1.70	46.0	
05/17/05	0505100-003A	50.0	<1.1	56.0	80.0	1900	4.30	92.0	1.70	33.0	6100
05/17/05	0505100-004A	73.0	<1.2	75.0	83.0	2400	4.00	77.0	2.10	37.0	5900
05/18/05	0505131-001A	56.0	<1.1	62.0	84.0	1500	4.70	93.0	1.80		7600
05/18/05	0505131-002A	45.0	<1.2	62.0	72.0	2100	4.70	49.0	2.00	39.0	6200
05/19/05	0505131-003A	44.0	<1.2	<u>58.0</u>	65.0	1400	4.90	49.0		32.0	5900
05/19/05	0505131-004A	59.0	<1.2	68.0	71.0	1600	5.90	<u>49.0</u> 55.0	1.50	35.0	5400
05/20/05	0505131-005A	50.0	<1.2	60.0	60.0	1600	0.75		1.70	36.0	7000
05/20/05	0505131-006A	53.0	<1.2	77.0	140	1800	6.10	61.0	1.10	47.0	<u>6100</u>
						1000	0.10	270	1.90	30.0	7600
AVERAGE		53.7	NA	61.8	79.3	1730.0	4.4	83.8	1.7	20.7	6400.0
STANDARD DEV	ATION	7.8	NA	8.8	21.6	316.4	1.4	64.4	0.3	38.7	6400.0
COEFFICIENT O	F VARIATION	14.6%	NA	14.3%	27.3%	18.3%	31.2%	76.9%	0.3 16.0%	<u>6.9</u> 17.8%	<u>707.1</u> 11.0%

Analyses performed by Life Science Laboratories, Inc

SAMPLE							1		1		
COLLECTION	LAB	As	Be	Cđ	Cr	Pb	Hg	l Ni	Se	l v l	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel		Vanadium	
12/12/05	0512118-001A	29.0	<1.2	49.0	61.0	1200	4.90	70.0	1.30	<120	
12/12/05	0512118-002A	24.0	<1.3	37.0	60.0	1900	3.10	49.0			8200
12/13/05	0512118-003A	20.0	<1.2	49.0	54.0	1400	3.90		1.60	26.0	3800
12/13/05	0512118-004A	25.0	<1.2	37.0	82.0	1300		230	0.86	37.0	4700
12/14/05	0603017-001A	18.0	<1.3	36.0			<0.12	73.0	1.30	<60	4000
12/14/05	0512118-006A	24.0	<1.2		53.0	1700	3.80	47.0	0.67	41.0	4400
12/15/05	0512142-001A	17.0		<u>37.0</u>	68.0	720	3.30	51	0.89	<60	3900
12/15/05	0512142-007A		<1.3	30.0	49.0	620	2.20	100	1.00	<63	3500
12/16/05		27.0	<1.2	50.0	59.0		5.40	37.0	1.40	34.0	4700
12/16/05	0512142-003A	26.0	<1.4	41.0	67.0	1200	4.80	_ 50.0	2.00	<70	4100
12/10/05	0512142-004A	26.0	<1.3	55.0	54.0	1100	5.50	40.0	2.20	34.0	5700
											0100
VERAGE		23.6	NA	42.1	60.7	1244.0	4.1	74.7	1.3	34.4	4700.0
TANDARD DEV		3.8	NA	7.7	9.1	368.4	1.1	54.8			4700.0
OEFFICIENT O	F VARIATION	16.0%	NA	18.2%	15.1%	29.6%	26.8%	73.3%	0.5	4.9	1306.9
						20.070	/0.0 /0	13.3%	35.8%	14.2%	27.8%

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
04/10/06	0604077-001A	50.0	<1.2	83.0	57.0	1800	2.50	44.0	1.80	34.0	6400
04/11/06	0604077-002A	60.0	<1.3	80.0	75.0	1700	7.60	46.0	1.40	31.0	6100
04/12/06	0604090-001A	34.0	<1.2	39.0	96.0	1100	1.20	22.0	1.30	47.0	5200
04/13/06	0604090-002A	47.0	<1.2	61.0	51.0	1200	4.00	84.0	1.90	55.0	5400
04/14/06	0604090-003A	47.0	<1.2	79.0	61.0	1500	9.90	45.0	1.40	30.0	5800
NA	NA								1.40	00.0	5000
NA	NA			[
NA	NA										
NA	NA										
NA	NA				····			****			

AVERAGE	47.6	NA	68.4	68.0	1460.0	5.0	48.2	1.6	39.4	5780.0
STANDARD DEVIATION	8.3	NA	16.6	16.1	272.8	3.2	20.0	0.2	9.9	440.0
COEFFICIENT OF VARIATION	17.5%	NA	24.3%	23.6%	18.7%	64.3%	41.5%	15.5%	25.1%	7.6%

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COLLECTION	LAB	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
DATE	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	
08/07/06	0608136-001A	51.0	<1.2	47.0	46.0	1000	3.30	140.0	1.20	34.0	4400
08/08/06	0608136-002A	51.0	<1.2	54.0	51.0	1400	4.90	44.0	1.50	34.0	5300
08/09/06	0608136-003A	29.0	<1.3	34.0	38.0	630	4.00	30	0.95	33.0	3000
08/10/06	0608136-004A	40.0	<1.2	48.0	57.0	1900	2.90	130.0	1.20	45.0	4000
08/11/06	0608136-005A	35.0	<1.2	42.0	71.0	1100	1.30	45.0	0.75	<u> </u>	
08/14/06	0608136-006A	44.0	<1.3	44.0	69.0	1000	3.00	85	1.20		4200
08/15/06	0608136-007A	33,0	<1.1	30.0	78.0	580	0.29	170	· · · · · · · · · · · · · · · · · · ·	54.0	3900
08/16/06	0608136-008A	29.0	<1.2	31.0	36.0	690	<0.12		0.67	90.0	3200
08/17/06	0608136-009A	32.0	<1.1	41.0	55.0	1100	<0.12 <0.11	<u> </u>	0.67		4300
08/18/06	0608136-010A	27.0	<1.2	33.0	57.0			43.0	0.76	40.0	7600
				00.0	07.0	2800	2.60	78.0	0.80	45.0	3400
AVERAGE	······································	37.1								-	
STANDARD DEV			NA	40.4	55.8	1220.0	2.2	82.1	1.0	47.3	4330.0
COEFFICIENT OF		8.5	<u>NA</u>	7.7	13.2	644.6	1.6	46.0	0.3	16.5	1259.4
	VARIATION	22.9%	<u>NA</u>	19.1%	23.6%	52.8%	73.9%	56.0%	28.1%	35.0%	29.1%

LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercurv	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
0704181-001A	40.0	<1.2	51.0	62.0				<u> </u>		4700
0704181-002A	36.0	<1.2	64.0	51.0						5100
0704181-003A	39.0	<1.2	70.0							14000
0704181-004A	55.0	<1.3	120	74.0	1800					8400
0704181-005A	62.0	<1.4	130							8300
0704181-006A	46.0	<1.3	79.0	81.0		1		1		6000
0704186-001A	53.0	<1.3	130	62.0	2100	1		<u> </u>		8500
0704186-002A	45.0	<1.3	87,0		1700	1				7200
0704186-003A	44.0	<1.3				1				5800
0704186-004A	41.0	<1.2	53.0	93	1200	4.60			·····	4800
	0704181-001A 0704181-002A 0704181-003A 0704181-004A 0704181-005A 0704181-006A 0704186-001A 0704186-002A 0704186-003A	D704181-001A 40.0 D704181-002A 36.0 D704181-003A 39.0 D704181-003A 39.0 D704181-004A 55.0 D704181-005A 62.0 D704181-006A 46.0 D704186-001A 53.0 D704186-002A 45.0 D704186-003A 44.0	# Arsenic Beryllium 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium Lead 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium Lead Mercury 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium Lead Mercury Nickel 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium Lead Mercury Nickel Selenium 0704181-001A 40.0 <1.2	# Arsenic Beryllium Cadmium Chromium Lead Mercury Nickel Selenium Vanadium 0704181-001A 40.0 <1.2

AVERAGE	46.1	<u>NA</u>	86.1	90.3	1600	6.9	90.1	1.9	28.4	7280
STANDARD DEVIATION	7.8	NA	28.7	57.9	300	1.8	47.1	0.4	7.1	2652
COEFFICIENT OF VARIATION	16.8%	NA	33.3%	64.1%	18.8%	26.7%	52.3%	20.8%	25.1%	36.4%
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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	Zn Zinc
08/09/07	0708082-001A	48.0	<1.2	48.0	65.0	2700	4.30	70.0	1.80	49.0	4000
08/10/07	0708082-002A	47.0	<1.2	36.0	330	990	2.90	290	2.60	49.0	4000
08/14/07	0708121-001A	44.0	<1.2	55.0	52.0	1100	5.20	110	2.00	37.0	
08/14/07	0708121-002A	45.0	<1.2	57.0	69.0	1400	6.40	51.0	2.70	46.0	4700
08/15/07	0708121-003A	39.0	<1.2	40,0	190	2500	2.90	160	2.20	42.0	5200
08/15/07	0708121-004A	65.0	<1.3	110	49.0	180	8.20	37	2.30	33.0	4100
08/16/07	0708121-005A	60.0	<6.5	70.0	57.0	980	7.20	120	<6.5		7300
08/16/07	0708121-006A	86.0	<1.4	120	49.0	3400	12.00	36.0	2.70	<32	5300
08/17/07	0708121-007A	48.0	<1.3	59.0	53.0	1300	5.80	40.0	2.30	31.0	8800
08/17/07	0708121-008A	74.0	<1.5	79.0	53.0	1400	7.40	35.0		41.0	5900
							<u></u>	30.0	2.20	29.0	6600
VERAGE		55.6	NA	67.4	96.7	1595	6.2	94.9	2.2	00 7	
TANDARD DEV		14.4	NA	26.8	87.7	919	2.6		2.3	39.7	5590
OEFFICIENT O	F VARIATION	26.0%	NA	39.7%	90.7%	57.6%	41.4%	76.9	0.3	7.2	1505
						01.070	41.470	81.0%	12.6%	18.1%	26.9%

SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
04/25/08	0805009-001A	73.0	<1.3	170.0	60.0	2300	13.00	34.0	1.50	35.0	9900
04/28/08	0805009-002A	91.0	<1.2	100.0	50.0	1600	6.50	62.0	1.80	26.0	7200
04/29/08	0805009-003A	54.0	<1.2	47.0	72.0	1100	3.00	200.0	<1.2	44.0	4700
04/29/08	0805009-004A	98.0	<1.4	120	85.0	2300	9.80	78.0	1.90	38.0	8100
04/30/08	0805021-001A	48.0	<1.3	61	88.0	1300	3.70	83.0	<1.3	49.0	4900
04/30/09	0805021-002A	80.0	<1.3	110.0	110.0	1500	12.00	36.0	2.00	32.0	7800
05/01/08	0805021-003A	47.0	<1.2	52	69.0	990	3.10	41.0	<1.2	44.0	4800
05/01/08	0805021-004A	95.0	<1.3	130.0	58.0	2000	9.40	33	2.60	25.0	10000
05/02/08	0805021-005A	38.0	<1.2	45.0	72	840	3.50	47	<1.2	39.0	6600
05/02/08	0805021-006A	72.0	<1.3	88.0	67	1500	6.20	46	1.70	53.0	8300
											0000
AVERAGE		69.6	NA	92.3	73.1	1543	7.0	66.0	1.9	38.5	7230
STANDARD DEV	IATION	20.6	NA	39.4	16.5	492	3.6	47.8	0.3	8.8	1875
COEFFICIENT O	F VARIATION	29.6%	NA	42.7%	22.5%	31.9%	51.3%	72.4%	17.9%	22.9%	25.9%

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SAMPLE COLLECTION DATE	LAB #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se	V Vanadium	'Zn Zinc
12/19/08	0812217-001A	33.0	<1.4	68.0	91.0	1400	11.00	59.0	1.50	28.0	5900
12/19/08	0812217-002A	26.0	<1.3	64.0	70	1900	7.80	77	1.50	23.0	4800
12/20/08	0812217-003A	35.0	<1.4	80.0	39.0	1100	8.30	72	2.10	23.0	6600
12/22/08	0812217-004A	31.0	<1.2	29.0	76.0	670	5.90	48.0	<1.2	61.0	
12/23/08	0812217-005A	<27	<27	60.0	190	1000	14.00	190	<27	57.0	2900
12/23/08	0812217-006A	27.0	<1.3	34	56.0	1100	4.10	45	<1.3		4100
12/24/08	0812217-007A	24.0	<1.3	43.0	150.0	680	6.50	260	1.60	32,0	3000
12/29/08	0901008-001A	51.0	<1.3	89	58.0	3600	7.50	38.0		46.0	4000
12/30/08	0901008-002A	24.0	<1.3	65.0	55.0	1600	7.50		1.70	24.0	6400
12/30/08	0901008-003A	19.0	<1.3	48.0	58.0	1200		33.0	1.50	18.0	4900
					00.0	1200	4.80	<u>51.0</u>	<1.3	30.0	3700
AVERAGE		30.0	NA	58.0	84.3	1425	77	07.0		·	
STANDARD DEV	IATION	8.8	NA	18.4	45.7		7.7	87.3	1.7	34.3	<u>4630</u>
COEFFICIENT OF	VARIATION	29.3%	NA	31.7%		810	2.8	71.8	0.2	14.3	1262
Applyment			<u>(1/1</u>	<u>91.770</u>	54.2%	56.8%	35.9%	82.2%	13.0%	41.6%	27.3%

Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn
5/11/2009	0905077-001A	46	<1.2								Zinc
5/11/2009	0905077-002A			39	82	1200	3.1	60	1.3	49	4500
		63	<1.3	78	94	1300	3.8	46	5	42	5900
5/12/2009	0905077-003A	80	<1.2	88	73	1500	4.3	34	6.3	45	6800
5/12/2009	0905077-004A	100	<1.2	100	76	4600	6.9	120	6.6	33	8600
5/13/2009	0905106-001A	62	<1.2	68	76	1400	4.5	79	3	46	5800
5/13/2009	0905106-002A	49	<1.2	41	170	1200	2.4	210	1.4	68	5100
5/14/2009	0905106-003A	59	<1.3	74	66	1900	6.7	71	2.6	38	10000
5/14/2009	0905106-004A	48	<1.2	50	65	1200	3.3	67	2.1	42	
5/15/2009	0905106-005A	46	<1,2	63	71	2100	4	64	{		5200
5/15/2009	905106-008A	43	<1.2	42	72	930	2.2	95	1.5	39	5200
							2.2	95	<1.2	48	5100
Average		59.6	NA	64,3	04.5	1700.0					
Standard Devia	ation				84,5	1733.0	4.0	84.6	3.3	45.0	6220.0
Coefficient of v		18.1	NA	21.1	31.2	1066.3	1.4	50,2	2.1	9.4	1767.5
Coencient of v	anation	30.4%	NA	32.9%	36.9%	61.5%	35.9%	59.4%	63.8%	21.0%	28.4%
Sample	T				·-····		r	·····	·		······································
Sample Collection	Lab	As	Be	Cd	Cr	 Ph	Ha				
	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr	Pb	Hg	Ni	Se	V	Zn
Collection			Be Beryllium <1.2	Cd Cadmium 55	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
Collection Date	#	Arsenic	Beryllium	Cadmium	P	Lead 770	Mercury 3.9	Nickel 59	Selenium 2.5	Vanadium 32	Zinc 32,000
Collection Date 10/16/2009 10/19/2009 10/20/2009	# 0910091-001A	Arsenic 36	Beryllium <1.2	Cadmium 55	Chromium 72	Lead	Mercury 3.9 7.6	Nickel 59 31	Selenium 2.5 1.5	Vanadium 32 36	Zinc 32,000 8400
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A	Arsenic 36 67	Beryllium <1.2 <1.3	Cadmium 55 110	Chromium 72 51	Lead 770 2000	Mercury 3.9 7.6 5.2	Nickel 59 31 37	Setenium 2.5 1.5 <1.3	Vanadium 32 36 29	Zinc 32,000 8400 5200
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009	# 0910091-001A 0910091-002A 0910091-003A	Arsenic 36 67 44	Beryllium <1.2 <1.3 <1.3	Cadmium 55 110 64	Chromium 72 51 47	Lead 770 2000 890	Mercury 3.9 7.6 5.2 9.9	Nickel 59 31 37 60	Setenium 2.5 1.5 <1.3 1.6	Vanadium 32 36 29 28	Zinc 32,000 8400 5200 8000
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A	Arsenic 36 67 44 66	Beryllium <1.2 <1.3 <1.3 <1.3	Cadmium 55 110 64 120	Chromium 72 51 47 55	Lead 770 2000 890 1700	Mercury 3.9 7.6 5.2	Nickel 59 31 37 60 38	Setenium 2.5 1.5 <1.3 1.6 1.3	Vanadium 32 36 29 28 43	Zinc 32,000 8400 5200 8000 6800
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A	Arsenic 36 67 44 66 55 60 36	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2	Cadmium 55 110 64 120 89	Chromium 72 51 47 55 57	Lead 770 2000 890 1700 1500	Mercury 3.9 7.6 5.2 9.9 3.2 3.8	Nickel 59 31 37 60 38 31	Setenium 2.5 1.5 <1.3 1.6 1.3 1.8	Vanadium 32 36 29 28 43 33	Zinc 32,000 8400 5200 8000 6800 8200
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-004A	Arsenic 36 67 44 66 55 60	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.2 <1.3	Cadmium 55 110 64 120 89 120	Chromium 72 51 47 55 57 48	Lead 770 2000 890 1700 1500 1500	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8	Nickel 59 31 37 60 38 31 30	Selenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38	Zinc 32,000 8400 5200 8000 6800 8200 4900
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009 10/22/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-005A	Arsenic 36 67 44 66 55 60 36	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.3 <1.2 <1.2	Cadmium 55 110 64 120 89 120 54	Chromium 72 51 47 55 57 48 48 46	Lead 770 2000 890 1700 1500 1500 850	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8 4.6	Nickel 59 31 37 60 38 31 30 67	Selenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38 31	Zinc 32,000 8400 5200 8000 6800 8200 4900 6200
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-004A	Arsenic 36 67 44 66 55 60 36 37	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.2 <1.2 <1.2 <1.2	Cadmium 55 110 64 120 89 120 54 78	Chromium 72 51 47 55 57 48 48 46 95	Lead 770 2000 890 1700 1500 1500 850 1100	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8	Nickel 59 31 37 60 38 31 30 67 51	Setenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38 31 23	Zinc 32,000 8400 5200 8000 6800 8200 4900 6200 7600
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009 10/23/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-005A	Arsenic 36 67 44 66 55 60 36 37 42 54	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.2 <1.3 <1.2 <1.2 <1.3 <1.3	Cadmium 55 110 64 120 89 120 54 78 98 140	Chromium 72 51 47 55 57 48 48 46 95 55 55 48	Lead 770 2000 890 1700 1500 1500 850 1100 1300	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8 4.6 11	Nickel 59 31 37 60 38 31 30 67	Selenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38 31	Zinc 32,000 8400 5200 8000 6800 8200 4900 6200
Collection Date 10/16/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009 10/23/2009 10/23/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-005A 0910113-006A	Arsenic 36 67 44 66 55 60 36 37 42 54 49.7	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.3 <1.2 <1.2 <1.2 <1.3 <1.2 <1.3 <1.3 NA	Cadmium 55 110 64 120 89 120 54 78 98 140 92.8	Chromium 72 51 47 55 57 48 46 95 55 55 48 55 55	Lead 770 2000 890 1700 1500 1500 850 1100 1300	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8 4.6 11	Nickel 59 31 37 60 38 31 30 67 51	Setenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38 31 23 20	Zinc 32,000 8400 5200 8000 6800 8200 4900 6200 7600 10000
Collection Date 10/16/2009 10/19/2009 10/20/2009 10/20/2009 10/21/2009 10/21/2009 10/22/2009 10/22/2009 10/23/2009	# 0910091-001A 0910091-002A 0910091-003A 0910091-004A 0910113-001A 0910113-002A 0910113-003A 0910113-005A 0910113-006A	Arsenic 36 67 44 66 55 60 36 37 42 54	Beryllium <1.2 <1.3 <1.3 <1.3 <1.2 <1.2 <1.3 <1.2 <1.2 <1.3 <1.3	Cadmium 55 110 64 120 89 120 54 78 98 140	Chromium 72 51 47 55 57 48 48 46 95 55 55 48	Lead 770 2000 890 1700 1500 1500 850 1100 1300 1900	Mercury 3.9 7.6 5.2 9.9 3.2 3.8 9.8 4.6 11 11	Nickel 59 31 37 60 38 31 30 67 51 44	Setenium 2.5 1.5 <1.3	Vanadium 32 36 29 28 43 33 38 31 23	Zinc 32,000 8400 5200 8000 6800 8200 4900 6200 7600

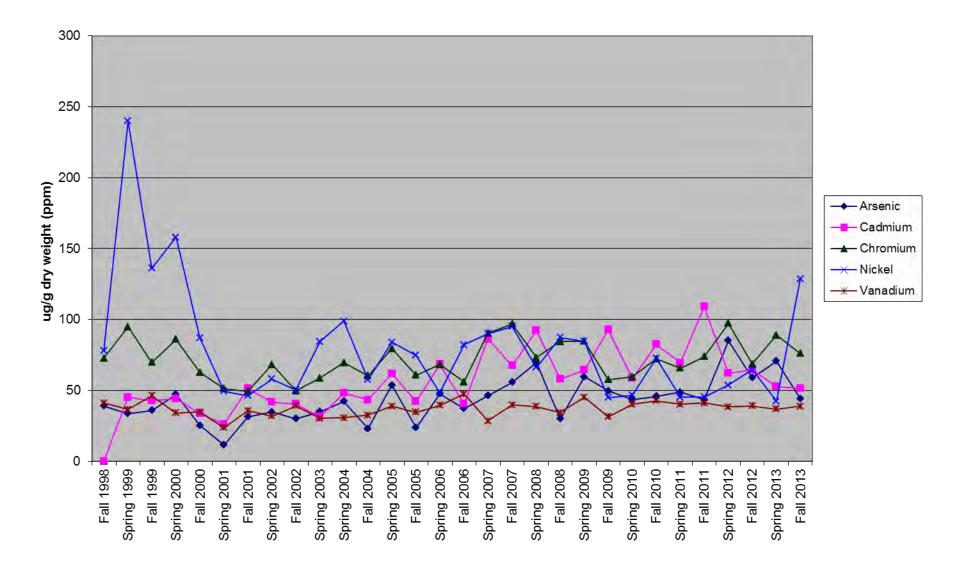
Sample Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
5/24/2010	1006054-001A	55	<1.2	77	68	1300	4.1	58	2.3	47	6500
5/25/2010	1006054-002A	40	<1.2	52	57	780	2.9	52	1.3	41	4500
5/25/2010	1006054-003A	52	<1.2	87	57	1300	5	37	2	26	7600
5/26/2010	1006054-004A	28	· <1.1	41	40	940	2.8	29	<1.1	32	3900
5/26/2010	1006054-006A	37	<1.3	62	58	1900	4.2	54	<1.3	44	5400
5/27/2010	1006054-007A	32	<1.2	46	46	610	5.3	66	<1.2	31	3500
5/27/2010	1006054-008A	43	<1.3	71	66	1400	7.3	48	1.6	35	
5/28/2010	1006054-009A	38	<1.2	39	69	680	4.3	33	<1.2		5200
5/28/2010	1006054-010A	46	<1.2	55	69	690	4.0	57	<1.2	65	4000
5/29/2010	1006054-011A	64	<1.2	54	66	960	2.2	33	<1.2	40	5300
····					0		2.2		\$1.Z	40	4900
Average		43.5	NA	58.4	59.6	1076.0	4,2	46.7	4.0		
									1.8	40.1	5080.0
Standard Devia	tion	11 0	NΔ	16.8							
Standard Devia Coefficient of v		11.0 25.3%	NA NA	15.8 27.0%	10.1 16.9%	396.2 36.8%	1.5 34,7%	12.8 27.4%	0.4 24.4%	10.8 27.0%	1245.3 24.5%
Coefficient of v Sample	ariation	25.3%	NA	27.0%	16.9%						
Coefficient of v Sample Collection	ariation Lab	25.3% As	NA Be	27.0% Cd	16.9% Cr						
Coefficient of v Sample Collection Date	ariation Lab #	25.3% As Arsenic	NA Be Beryllium	27.0% Cd Cadmium	16.9% Cr Chromium	36.8% Pb Lead	34.7% Hg Mercury	27.4%	24.4%	27.0%	24.5%
Coefficient of v Sample Collection Date 9/27/2010	Lab # 1010020-001A	25.3% As Arsenic 79	NA Be Beryllium <1.2	27.0% Cd Cadmium 82	16.9% Cr Chromium 83	36.8% Pb Lead 1200	34.7% Hg Mercury 5.7	27.4% Ni Nickel 200	24.4% Se Selenium 4.9	27.0% V	24.5% Zn
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010	Lab # 1010020-001A 1010020-002A	25.3% As Arsenic 79 38	NA Be Beryllium <1.2 <1.2	27.0% Cd Cadmium 82 93	16.9% Cr Chromium 83 100	36.8% Pb Lead 1200 830	34.7% Hg Mercury 5.7 3.3	27.4% Ni Nickel 200 46	24.4% Se Selenium	27.0% V Vanadium	24.5% Zn Zinc
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010	Lab # 1010020-001A 1010020-002A 1010020-003A	25.3% As Arsenic 79 38 35	NA Be Beryllium <1.2 <1.2 <1.3	27.0% Cd Cadmium 82 93 95	16.9% Cr Chromium 83 100 45	36.8% Pb Lead 1200 830 1200	34.7% Hg Mercury 5.7 3.3 9	27.4% Ni Nickel 200 46 36	24.4% Se Selenium 4.9 2.2 1.5	27.0% V Vanadium 33	24.5% Zn Zinc 6,400
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A	25.3% As Arsenic 79 38 35 37	NA Be Beryllium <1.2 <1.2 <1.3 <1.2	27.0% Cd Cadmium 82 93 95 67	Cr Chromium 83 100 45 64	36.8% Pb Lead 1200 830 1200 1000	Hg Mercury 5.7 3.3 9 5	27.4% Ni Nickel 200 46 36 91	24.4% Se Selenium 4.9 2.2 1.5 1.6	27.0% V Vanadium 33 50	24.5% Zn Zinc 6,400 5200
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A	25.3% As Arsenic 79 38 35 35 37 58	NA Be Beryllium <1.2 <1.2 <1.3 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84	16.9% Cr Chromium 83 100 45 64 56	36.8% Pb Lead 1200 830 1200 1000 1200	Hg Mercury 5.7 3.3 9 5 8	27.4% Ni Nickel 200 46 36 91 38	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2	27.0% V Vanadium 33 50 29 39 40	24.5% Zn Zinc 6,400 5200 6000
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A 1010020-007A	25.3% As Arsenic 79 38 35 37 58 49	NA Be Beryllium <1.2 <1.2 <1.3 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93	16.9% Cr Chromium 83 100 45 64 56 70	36.8% Pb Lead 1200 830 1200 1000 1200 1600	Hg Mercury 5.7 3.3 9 5 8 4.9	27.4% Ni Nickel 200 46 36 91 38 63	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2 2.9	27.0% V Vanadium 33 50 29 39 40 32	24.5% Zn Zinc 6,400 5200 6000 5800
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A	25.3% As Arsenic 79 38 35 37 58 49 61	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140	16.9% Cr Chromium 83 100 45 64 56 70 51	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800	Hg Mercury 5.7 3.3 9 5 5 8 4.9 3.3	27.4% Ni Nickel 200 46 36 91 38 63 54	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2 2.9 3	27.0% V Vanadium 33 50 29 39 40 32 29	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6600 9000
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A 1010020-007A 1010020-008A	25.3% As Arsenic 79 38 35 37 58 49 61 30	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140 48	16.9% Cr Chromium 83 100 45 64 56 70 51 98	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800 1099	Hg Mercury 5.7 3.3 9 5 8 4.9 3.3 3.5	27.4% Ni Nickel 200 46 36 91 38 63 54 85	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2 2.9 3 1.5	27.0% V Vanadium 33 50 29 39 40 32 29 70	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6500 6600 9000 4400
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A 1010020-007A 1010020-008A 1010020-009A	25.3% As Arsenic 79 38 35 37 58 49 61	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140 48 49	16.9% Cr Chromium 83 100 45 64 56 70 51 98 75	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800 1099 1100	Hg Mercury 5.7 3.3 9 5 8 4.9 3.3 3.5 2.1	27.4% Ni Nickel 200 46 36 91 38 63 54 85 72	24.4% Seenium 4.9 2.2 1.5 1.6 2.2 2.9 3 1.5 1.8	27.0% V Vanadium 33 50 29 39 40 32 29 70 60	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6500 6600 9000 4400 4800
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010 10/1/2010	Lab # 1010020-001A 1010020-002A 1010020-002A 1010020-004A 1010020-006A 1010020-007A 1010020-008A 1010020-009A 1010020-010A	25.3% As Arsenic 79 38 35 37 58 49 61 30 35	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140 48	16.9% Cr Chromium 83 100 45 64 56 70 51 98	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800 1099	Hg Mercury 5.7 3.3 9 5 8 4.9 3.3 3.5	27.4% Ni Nickel 200 46 36 91 38 63 54 85	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2 2.9 3 1.5	27.0% V Vanadium 33 50 29 39 40 32 29 70	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6500 6600 9000 4400
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010 10/1/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A 1010020-006A 1010020-007A 1010020-009A 1010020-010A 1010020-011A	25.3% As Arsenic 79 38 35 37 58 49 61 30 35	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140 48 49	16.9% Cr Chromium 83 100 45 64 56 70 51 98 75	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800 1099 1100 1500	Hg Mercury 5.7 3.3 9 5 8 4.9 3.3 3.5 2.1 5.2	27.4% Ni Nickel 200 46 36 91 38 63 54 85 72 42	24.4% Se Selenium 4.9 2.2 1.5 1.6 2.2 2.9 3 1.5 1.8 2.2	27.0% V Vanadium 33 50 29 39 40 32 29 70 60 43	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6500 6600 9000 4400 4800 5500
Coefficient of v Sample Collection Date 9/27/2010 9/28/2010 9/28/2010 9/29/2010 9/29/2010 9/30/2010 9/30/2010 10/1/2010 10/1/2010	Lab # 1010020-001A 1010020-002A 1010020-003A 1010020-004A 1010020-006A 1010020-006A 1010020-007A 1010020-009A 1010020-010A 1010020-011A	25.3% As Arsenic 79 38 35 37 58 49 61 30 35 35 35	NA Be Beryllium <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2 <1.2	27.0% Cd Cadmium 82 93 95 67 84 93 140 48 49 73	16.9% Cr Chromium 83 100 45 64 56 70 51 98 75 80	36.8% Pb Lead 1200 830 1200 1000 1200 1600 1800 1099 1100	Hg Mercury 5.7 3.3 9 5 8 4.9 3.3 3.5 2.1	27.4% Ni Nickel 200 46 36 91 38 63 54 85 72	24.4% Seenium 4.9 2.2 1.5 1.6 2.2 2.9 3 1.5 1.8	27.0% V Vanadium 33 50 29 39 40 32 29 70 60	24.5% Zn Zinc 6,400 5200 6000 5800 6500 6500 6600 9000 4400 4800

Sample Collection Date	Lab #	As Arsenic	Be Beryllium	Cd Cadmium	Cr Chromium	Pb Lead	Hg Mercury	Ni Nickel	Se Selenium	V Vanadium	Zn Zinc
6/7/2011	K1106170-001A	62	0.46	68	69	1800	3.7	35	2.2	43	5800
6/7/2011	K1106170-002A	61	0.44	100	66	1300	7.3	30	2.2	35	7000
6/8/2011	K1106170-003A	54	0.48	63	66	1000	3	77	2	38	5800
6/8/2011	K1106170-004A	65	0.41	100	74	2100	8.7	43	1.9	37	6900
6/9/2011	K1106170-006A	46	0.4	72	59	1200	4.3	59	1.9	34	6200
6/9/2011	K1106170-007A	51	0.43	75	57	860	4,9		2.8	37	6300
6/10/2011	K1106170-008A	27	0.71	38	70	610	7.9	40	3.8	40	4000
6/10/2011	K1106170-009A	44	0.54	67	67	1300	4.2	51	2,4	44	5500
6/11/2011	K1106170-010A	34	0.59	46	67	1000	6	46	1.8	55	6200
6/11/2011	K1106170-011A	42	0.46	66	62	1100	5.1	30	1.4	37	6100
L			b								0100
Average		48.6	0.5	69.5	65.7	1227.0	5.5	45.0	2.2	40.0	5980.0
Standard Devia	ation	12.4	0.1	19.7	5.1	439.2	1.9	14.4	0.7	6.2	837.7
Coefficient of v	ariation	25.6%	19.6%	28.4%	7.8%	35.8%	34.6%	32.0%	29.6%	15.4%	14.0%
Sample Collection	Lab	As	Be	Cd	Cr	Ръ	Hg	Ni	Se	V	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
10/18/2011	K1110337-001A	45	0.36	84	58	1200	5.2	44	1.8	42	8,600
10/18/2011	K1110337-002A	46	0.46	330	130	2200	6.3	39	1.8	48	6100
10/19/2011	K1110337-003A	40	0.5	59	74	1100	3	63	1.8	42	5000
10/19/2011	K1110337-004A	48	0.55	77	82	1200	5.8	50	2.7	48	6700
10/20/2011	K1110337-006A	53	0.47	120	80	1600	17	58	2.5	38	9400
10/20/2011	K1110337-007A	37	0.41	91	68	1300	14	43	2	41	6700
10/21/2011	K1110337-008A	31	0.36	69	57	990	6	32	4.5	31	7000
10/21/2011	K1110337-009A	47	0.56	120	65	2000	9.5	35	3.6	41	7800
10/26/2011	K1110337-010A	31	0.63	43	71	830	3.9	55	1.5	40	4900
10/20/2011	K1110337-011A	55	0.34	96	53	1200	4.7	35	2.3	40	6900
Average	T	43.3	0.45	108.9	73.8	1362	764	15.4			
Standard De	viation	8.4	0.45	81.4	22.0	439.5	7.54 4.6	45.4	2.5	41.1	6910
Coefficient o		19.3%	21.7%	74.8%	22.0	32.3%	4.6	10.7 23.5%	0.9	4.8	1425.5
			-1.170	14.070	20.070	JZ.J 70	00.070	23.3%	38.4%	11.8%	20.6%

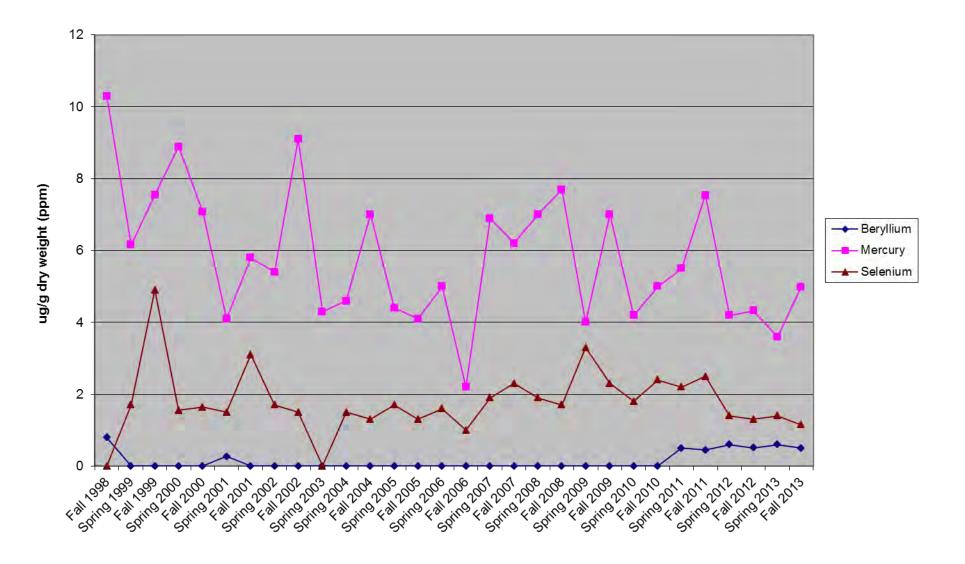
Sample Collection	Lap	As	Be	Cd	Cr	Pb	Hg	Ni	Se	v	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
6/12/2012	K1206354-011A	120.0	0.6	67.0	110.0	770.0	3.8	93.0	1.6	37.0	4900
6/12/2012	K1206354-012A	90.0	0.5	64.0	78.0	790.0	6.4	35.0	0.8	40.0	4400
6/13/2012	K1206354-013A	110.0	0.6	80.0	100.0	1500.0	4.6	46.0	1.2	35.0	5200
6/13/2012	K1206354-014A	76.0	0.6	57.0	84.0	530.0	3.1	53.0	1.1	36.0	4300
6/20/2012	K1206354-015A	56.0	1.4	39.0	57.0	1100.0	0.5	49.0	1.0	35.0	3700
6/14/2012	K1206354-016A	71.0	0.5	79.0	71.0	1600.0	6.3	31.0	2.1	34.0	4800
6/15/2012	K1206354-017A	56.0	0.7	32.0	94.0	2400.0	3.1	64.0	1.1	55.0	4100
6/15/2012	K1206354-018A	87.0	0.5	73.0	75.0	530.0	6.4	35.0	2.1	42.0	6200
6/19/2012	K1206354-019A	98.0	0.5	72.0	74.0	1700.0	4.2	33.0	1.8	37.0	6300
6/19/2012	K1206354-020A	87.0	0.5	57.0	230.0	1600.0	3.3	98.0	1.3	33.0	9400
Average		85.1	0.6	62.0	97.3	1252.0	4.2	53.7	1.4	38.4	5330.0
Standard Dev	riation	21.1	0.3	16.1	49.1	608.6	1.9	24.4	0.5	6.4	1661.4
Coefficient of	variation	24.8%	43.1%	26.0%	50.5%	48.6%	44.9%	45.4%	35.6%	16.8%	31.2%
Sample									_		
Collection	Lab	As	Be	Cd	Cr	Pb	Hg 	Ni	Se	V	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
9/25/2012	k1210235-011A	87	0.5	64	66	1300	3.2	60	0.85	37	6600
9/26/2012 9/27/2012	K1210235-012A K1210235-013A	40 48	0.48	38 42	63 57	650 590	2.5 2	49 84	3.6 0.62	33 47	3800 4200
10/2/2012	K1210235-013A	40 55	0.5	42 79	57 71	2100	 5.6	39	0.68	41	6800
10/2/2012	K1210235-015A	55	0.46	73	66	880	3.7	40	1.9	31	8600
10/3/2012	K1210235-016A	59	0.54	83	65	1600	5.9	38	1.5	36	6500
10/4/2012	K1210235-017A	60	0.63	78	91	1300	4.6	100	0.8	42	6300
10/5/2012	K1210235-018A	54	0.5	60	66	1300	1.8	120	0.75	38	21000
10/5/2012	K1210235-019A	88	0.53	84	72	1400	8.7	71	1.6	46	7100
10/6/2012	K1210235-020A	43	0.44	44	68	600	5.2	43	0.64	39	4100
Average		58.9	0.511	64.5	68.5	1172	4.32	64.4	1.294	39	7500
Standard D		16.4	0.1	17.8	8.9	490.9	2.1	28.7	0.9	5.2	4983.3
Coefficient	of variation	27.8%	10.2%	27.5%	13.0%	41.9%	49.3%	44.6%	72.0%	13.2%	66.4%

				ALL F	2013 ASH RESULTS IN						
Sample											
Collection	Lab	As	Be	Cd	Cr	Pb	Hg	Ni	Se	V	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
6/11/2013	K1306243-011A	68.0	0.8	54.0	85.0	1300.0	3.1	52.0	1.6	38.0	4800
6/12/2013	K1306243-012A	68.0	0.7	56.0	76.0	1700.0	4.7	35.0	1.8	33.0	5200
6/12/2013	K1306243-013A	57.0	0.6	43.0	76.0	790.0	3.2	32.0	1.1	32.0	5100
6/13/2013	K1306243-014A	54.0	0.7	39.0	96.0	560.0	2.3	48.0	0.6	51.0	4100
6/13/2013	K1306243-015A	67.0	0.6	53.0	77.0	810.0	2.8	40.0	1.5	31.0	6100
6/14/2013	K1306243-016A	70.0	0.6	48.0	67.0	780.0	4.3	30.0	1.3	32.0	4100
6/18/2013	K1306243-017A	78.0	0.5	65.0	69.0	790.0	3.3	32.0	1.9	33.0	5200
6/18/2013	K1306243-018A	58.0	0.6	46.0	82.0	770.0	3.1	70.0	1.2	39.0	3800
6/19/2013	K1306243-019A	98.0	0.5	53.0	100.0	1000.0	4.3	65.0	0.8	37.0	4500
6/19/2013	K1306243-20A	87.0	0.6	68.0	160.0	1300.0	5.2	120.0	1.9	42.0	5400
0/19/2013	100021020/0	07.0	0.0	00.0	100.0	1000.0	0.2	120.0	1.0	12.0	0100
Average		70.5	0.6	52.5	88.8	980.0	3.6	52.4	1.4	36.8	4830.0
Standard Deviation		13.8	0.1	9.1	27.2	347.2	0.9	27.6	0.4	6.2	708.8
Coefficient of variation		19.6%	16.2%	17.3%	30.6%	35.4%	25.7%	52.6%	32.0%	16.8%	14.7%
	Vanation	10.070	10.270	11.070	00.070	00.170	20.170	02.070	02.070	10.070	11.770
Sample											
Collection	Lab	As	Be	Cd	Cr	Pb	Hg	Ni	Se	V	Zn
Date	#	Arsenic	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Vanadium	Zinc
11/4/2013	K1311221-011A		- , -								-
		53	0.45	53	64	1700	3.9	41	1	45	5300
11/4/2013	K1311221-012A	53 55	0.45 0.54	53 61	64 66		3.9 4.4		1 1.2	1 1	5300 6100
11/4/2013 11/5/2013						1700		41	-	45	
	K1311221-012A	55	0.54	61	66	1700 740	4.4	41 37	1.2	45 47	6100
11/5/2013	K1311221-012A K1311221-013A	55 51	0.54 0.45	61 67	66 66	1700 740 1100	4.4 5.1	41 37 41	1.2 1.7	45 47 31	6100 5800
11/5/2013 11/5/2013	K1311221-012A K1311221-013A K1311221-014A	55 51 46	0.54 0.45 0.43	61 67 55	66 66 110	1700 740 1100 1500	4.4 5.1 3.4	41 37 41 390	1.2 1.7 1.3	45 47 31 32	6100 5800 5000
11/5/2013 11/5/2013 11/6/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A	55 51 46 32	0.54 0.45 0.43 0.49	61 67 55 40 64 39	66 66 110 78 94 59	1700 740 1100 1500 720	4.4 5.1 3.4 4.4 4 4.1	41 37 41 390 160 100 330	1.2 1.7 1.3 0.66 1.4 0.9	45 47 31 32 37 38 35	6100 5800 5000 3800
11/5/2013 11/5/2013 11/6/2013 11/6/2013 11/13/2013 11/13/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A K1311221-018A	55 51 46 32 53 31 45	0.54 0.45 0.43 0.49 0.48 0.44 0.57	61 67 55 40 64 39 56	66 66 110 78 94 59 63	1700 740 1100 1500 720 720 1100 1100	4.4 5.1 3.4 4.4 4 4.1 7.3	41 37 41 390 160 100 330 51	1.2 1.7 1.3 0.66 1.4 0.9 1.7	45 47 31 32 37 38 35 34	6100 5800 5000 3800 6100 4000 5300
11/5/2013 11/5/2013 11/6/2013 11/6/2013 11/13/2013 11/13/2013 11/14/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A K1311221-018A K1311221-019A	55 51 46 32 53 31 45 38	0.54 0.45 0.43 0.49 0.48 0.44 0.57 0.6	61 67 55 40 64 39 56 38	66 66 110 78 94 59 63 70	1700 740 1100 1500 720 720 1100 1100 600	4.4 5.1 3.4 4.4 4 4.1 7.3 4.3	41 37 41 390 160 100 330 51 66	1.2 1.7 1.3 0.66 1.4 0.9 1.7 0.78	45 47 31 32 37 38 38 35 34 40	6100 5800 5000 3800 6100 4000 5300 4400
11/5/2013 11/5/2013 11/6/2013 11/6/2013 11/13/2013 11/13/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A K1311221-018A	55 51 46 32 53 31 45	0.54 0.45 0.43 0.49 0.48 0.44 0.57	61 67 55 40 64 39 56	66 66 110 78 94 59 63	1700 740 1100 1500 720 720 1100 1100	4.4 5.1 3.4 4.4 4 4.1 7.3	41 37 41 390 160 100 330 51	1.2 1.7 1.3 0.66 1.4 0.9 1.7	45 47 31 32 37 38 35 34	6100 5800 5000 3800 6100 4000 5300
11/5/2013 11/5/2013 11/6/2013 11/6/2013 11/13/2013 11/13/2013 11/13/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A K1311221-018A K1311221-019A	55 51 46 32 53 31 45 38	0.54 0.45 0.43 0.49 0.48 0.44 0.57 0.6	61 67 55 40 64 39 56 38	66 66 110 78 94 59 63 70	1700 740 1100 1500 720 720 1100 1100 600	4.4 5.1 3.4 4.4 4 4.1 7.3 4.3	41 37 41 390 160 100 330 51 66	1.2 1.7 1.3 0.66 1.4 0.9 1.7 0.78	45 47 31 32 37 38 38 35 34 40	6100 5800 5000 3800 6100 4000 5300 4400
11/5/2013 11/5/2013 11/6/2013 11/6/2013 11/13/2013 11/13/2013 11/13/2013 11/14/2013	K1311221-012A K1311221-013A K1311221-014A K1311221-015A K1311221-016A K1311221-017A K1311221-018A K1311221-019A K1311221-020A	55 51 46 32 53 31 45 38 37	0.54 0.45 0.43 0.49 0.48 0.44 0.57 0.6 0.58	61 67 55 40 64 39 56 38 40	66 66 110 78 94 59 63 70 91	1700 740 1100 1500 720 720 1100 1100 600 580	4.4 5.1 3.4 4.4 4 4.1 7.3 4.3 9	41 37 41 390 160 100 330 51 66 69	1.2 1.7 1.3 0.66 1.4 0.9 1.7 0.78 0.87	45 47 31 32 37 38 35 34 40 48	6100 5800 3800 6100 4000 5300 4400 4800

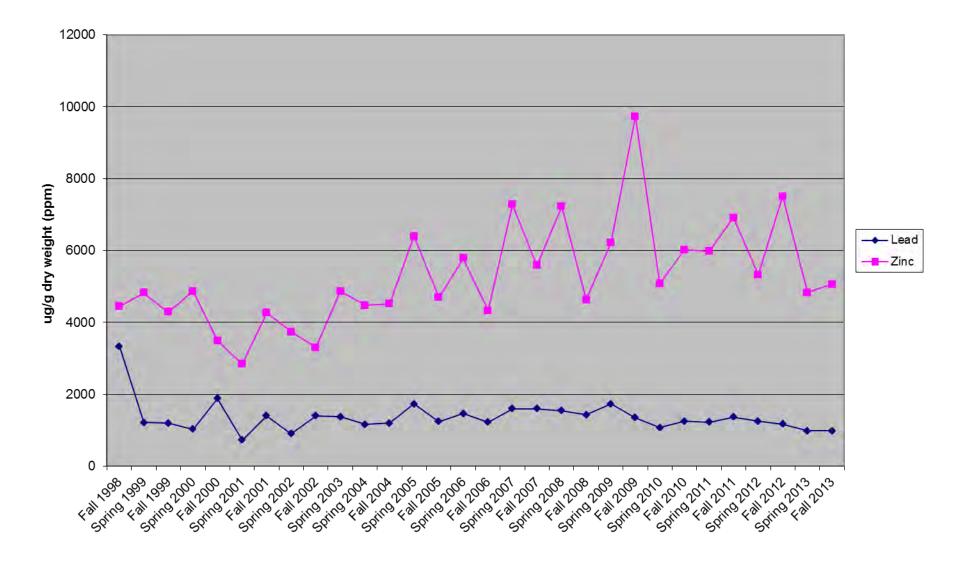
VII.A. Mean Values Ash Data Dry Weight



VII.B. Mean Values Ash Data Dry Weight



VII.C. Mean Values Ash Data Dry Weight



011-	As	Cd	Сг	Hg	Ni	Pb	Se	Zn
Site	Arsenic		Chromium	Mercury	Nickel	Lead	Selenium	Zinc
Hempstead	17.2	29.5	72.1	15.9	14100	1270	0.82	2440
Hempstead	17.4	29.1	43	16.9	84	1480	1.7	3020
Hempstead	15.9	31.9	48.3	16.8	49	1620		2440
Oneida Co.	13.6	16.4	132	0.13	193	369	<1.2	1350
Oneida Co.	<6.4	15.6	96.5	<0.13	159	571	<1.3	1270
Oneida Co	7.7	17.7	111	0.22	211	1110	<1.3	1610
Westchester	12.6	31.8	49.9	1.9	54	3180	<1.2	2410
Westchester	18.4	32.3	77.7	1.7	49	2570	<1.3	2520
Westchester	13.3	29.1	56.6	2	47	2030	<1.2	2250
Dutchess Co.	15.7	42.9	42.5	13.4	55	1400	1.6	3530
Dutchess Co.	12.6	43.3	37.1	12.2	98	1280	1.4	3080
Dutchess Co.	14.3	39.6	30.2	31	84	1180	1.8	2820
Babylon	14.5	35.0	47	9.8	88	997	1.4	3360
Babylon	17.7	37.4	67.5	9.3	291	1080	1.2	3760
Babylon	14.6	31.5	66.6	9.8	117	844	1.4	3580
Islip	15.3	32.2	52	13	111	1480	<1.2	4870
Islip	20.4	39.5	62.8	21.5	338	1710	<1.2	12900
Islip	12.6	32.6	57.8	20.6	206	1670	<1.2	8690
Dutchess Co.	30.0	42.1	89.6	24.3	80	1510	<7.10	3940
Dutchess Co.	28.2	36.6	30.6	23.2	42	1370	<7.1	3530
Dutchess Co.	34.3	41.2	35.3	24	71	1820	<7.2	3810
Babylon	34.6	82.6	6530	6.5	3880	2960	<12.3	6940
Babylon	39.1	90.9	69.7	11.4	160	4680	<6.1	13800
Babylon	31.5	72.8	87.8	11.9	250	3490	<12.1	6960
Westchester	14.9	27.3	24.3	0.75	28.5	1040	<5.7	2240
Westchester	14.0	23.4	38.3	0.79	33.6	1050	<5.8	1960
Westchester	16,2	17.3	20.8	0.87	19.8	828	<5.8	1690
Hempstead	22.6	17.5	19	17.6	20.5	481	1.2	1120
Hempstead	32.6	30.7	202	17.4	166	686	<5.8	1850
Hempstead	23.5	32.7	24.9	13	28.4	898	12.3	2630
Oneida Co.	9.7	7.7	49	0.65	141	987	4.2	1450
Oneida Co.	13,0	9.1	68.2	0.62	156	2720	4.6	1430
Oneida Co.	31.6	9.5	111	0.95	314	1060	<9.9	1640
				0.00		1000	-9.9	1040
Average	19.1	33.6	259	10.9	658	1558	2.66	3666
Standard Deviation	8.3	18.3	1109	8.7	2463	934	3.00	2988
Coefficient. of Variation	43%	55%	428%	80%	374%	<u> </u>	113%	<u>2988</u> 81%

New York State DEC Ash Residue Characterization Project March 1992 Summary of "Combined" (Fly and Bottom) Ash Results All Results in ug/g (ppm)