UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

May 4, 2011

City of East Chicago Schools
210 East Columbus Dr
East Chicago, Indiana 46312

Subject: Soil sampling results for 455 E. 148th Street

To whom it may concern:

In August 2010, U.S. Environmental Protection Agency (EPA) collected samples from properties in the residential neighborhood in East Chicago, north of the former USS Lead Site, as part of an ongoing investigation of soil lead concentrations in the area. This letter contains the laboratory results for the soil collected from the western field/walking track area on your property at 455 E. 148th Street.

The property was divided into quadrants marked A, B, C, and D. Five boreholes were made in each quadrant and samples were taken from four different depths (0 to 6 inches, 6 to 12 inches, 12 to 18 inches, and 18 to 24 inches). Samples from the same depth interval from each boring in each quadrant were mixed together to get a representative sample for that depth in each yard at your property.

EPA collected soil samples to evaluate the presence of metals and polycyclic aromatic hydrocarbons (PAHs) in the soils at your property. EPA has developed screening levels for lead in soil (SSLs in the attached Table 1) which help determine if a property should be further studied. For example, soil samples from residential yards which contain more than 400 parts per million (ppm) of lead may require further investigation or removal of impacted soil. One part per million is similar to four drops of ink in a 55-gallon barrel of water. None of the samples from your property exceeded 400 ppm for lead.

Screening levels have also been developed for most of the compounds that the samples from your property were tested for. Several chemicals exceeded the established screening levels on your property, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenz(a,h)anthracene, and indeno(1,2,3-CD)pyrene. The attached Table I, Contaminants of Interest in Surface Soils, indicates all compounds that were detected during the laboratory analysis for metals and PAHs and associated screening levels that have been developed for those compounds. As indicated on Table I, EPA has not established screening levels for every compound listed. Sample results that exceeded established screening levels are displayed in bold and shaded on the table.

Attachment 1 contains the laboratory reporting forms (Form I's) which contain the sample results for samples taken at your property. Some samples were analyzed multiple times to obtain a more accurate and representative result. For example, some compounds were analyzed once using typical analytical method and again using a more sensitive method to achieve lower detection limits for compounds present at lower concentrations. Additionally, some samples were diluted and reanalyzed to obtain more accurate results. Analytical reports for samples that were re-analyzed for any reason are included in Attachment 1. A qualified chemist reviewed all of the different analytical results for the same sample, and chose the sample result that best represents the concentration of each compound in each sample to provide the highest quality data possible. In each case, the most scientifically sound analytical measurement for each parameter was retained for reporting purposes and is shown on Table 1. Other analytical results for each parameter in a given sample are considered unusable in preference to the most scientifically sound result.

While EPA is completing studies and developing a final cleanup plan, EPA will determine whether concentrations of soils in your yard require cleanup. *During this period, EPA will be evaluating whether immediate interim cleanup actions are required.* As soon as we have developed a final cleanup plan, we will present it to you and the other East Chicago residents at public information sessions within the community. We hope to be able to present the final cleanup plan to you by early *2012* though we will be conducting other public information sessions prior to that.

Included in this mailing is a guide for protecting your children and yourself from lead-contaminated soil. We encourage you and your family to follow the recommendations until a final cleanup takes place.

If you have any questions about this letter or the sampling results, I urge you to call me toll free at 1-800-621-8431 ext. 38983 or email me at berkoff.michael@epa.gov.

Sincerely,

Michael Berkoff

Michael Berkoff
EPA Remedial Project Manager

Table 1
Contaminants of Interest in Surface Soils
USS Lead Site, East Chicago, IN
Property: 455 148th

				QA			
	Analyte	SSL	Units	0"-6"	6"-12"	12"-18"	18"-24"
METALS	Aluminum	77,000	mg/kg	4,800	4,530	2,380	2,040
	Antimony	31	mg/kg	1.5 J	1.2 J	1.7 J	1.7 J
	Arsenic	14.1	mg/kg	5.3 J	4.5 J	3.4 J	2.9 J
	Barium	15,000	mg/kg	62.7	38.8	20.5 J	17.9 J
	Beryllium	160	mg/kg	ND	ND	ND	ND
	Cadmium	12	mg/kg	0.85 J+	0.58 J	0.4 J+	0.59 J+
	Calcium	NE	mg/kg	24,100 J	23,800 J	29,500 J	34,300 J
	Chromium, Total	120,000	mg/kg	13.2 J	9.4 J	5.2 J	8.3 J
	Cobalt	23	mg/kg	3.5 J	3.1 J	2.3 J	2.2 J
	Copper	3100	mg/kg	41.8 J	27.1 J	15.4 J	16.5 J
	Iron	55,000	mg/kg	8,670 J	7,410 J	4,940 J	4,740 J
	Lead	400	mg/kg	87.7	68.8	45.9	28.5
	Magnesium	NE	mg/kg	11,900	12,300	14,800	16,900
	Manganese	1,800	mg/kg	228	183	162	182
	Mercury	5.6	mg/kg	0.16 J-	ND	ND	ND
	Nickel	1,500	mg/kg	11.7	9.7	5.3	5
	Potassium	NE	mg/kg	633	501 J	286 J	277 J
	Selenium	390	mg/kg	ND	ND	ND	ND
	Vanadium	390	mg/kg	14.1	12.1	8.3	7.1
	Zinc	23,000	mg/kg	146 J	123 J	90.1 J	76.2 J
PAH's	2-Methylnaphthalene	310,000	ug/kg	7.7	7.3	10	5.1
	Acenaphthene	3,400,000	ug/kg	4	3.7 J	6.6	ND
	Acenaphthylene	NE	ug/kg	33	24	99	27
	Anthracene	17,000,000	ug/kg	20	94	69	20
	Benzo(a)anthracene	150	ug/kg	44	43	100	40
	Benzo(a)pyrene	97	ug/kg	37	35	**120**	28
	Benzo(b)fluoranthene	160	ug/kg	32	49	130	20
	Benzo(g,h,i)perylene	NE	ug/kg	21	79	62	23
	Benzo(k)fluoranthene	1,500	ug/kg	34	92	88	30
	Chrysene	15,000	ug/kg	64	63	140	51
	Dibenz(a,h)anthracene	26	ug/kg	9.7	9.4	18	7.6
	Fluoranthene	2,300,000	ug/kg	83	86	180	73
	Fluorene	2,300,000	ug/kg	ND	ND	ND	ND
	Indeno(1,2,3-CD)pyrene	150	ug/kg	9.7	62	29	12
	Naphthalene	3,600	ug/kg	5.6	8.3	7.4	ND
	Phenanthrene	NE	ug/kg	58	55	120	34
	Pyrene	1,700,000	ug/kg	70	70	170	65

Notes:

Bold/Shaded values indicate a SSL exceedance

PAH	Polycyclic aromatic hydrocarbon
SSL	Soil screening level
NE	SSL not established
J	Estimated result
J-	Underestimated result
J+	Overestimated result
µg/kg	Microgram per kilogram
mg/kg	Milligram per kilogram
ND	Analyte Not Detected in this sample

Table 1
Contaminants of Interest in Surface Soils
USS Lead Site, East Chicago, IN
Property: 455 148th

				QC			
	Analyte	SSL	Units	0"-6"	6"-12"	12"-18"	18"-24"
METALS	Aluminum	77,000	mg/kg	2,860	3,790	2,290	2,070
	Antimony	31	mg/kg	ND	ND	ND	2.9 J
	Arsenic	14.1	mg/kg	7.3	9.8	11	6.8
	Barium	15,000	mg/kg	37.6 J+	44.9 J+	27 J+	19.7 J
	Beryllium	160	mg/kg	0.28 J	0.34 J	ND	ND
	Cadmium	12	mg/kg	ND	ND	ND	0.46 J
	Calcium	NE	mg/kg	28,500	26,400	33,600	27,700
	Chromium, Total	120,000	mg/kg	10.6	14.5	6.4	5.4
	Cobalt	23	mg/kg	3.9 J	5.1 J	3.7 J	2.6 J
	Copper	3100	mg/kg	36.4	55.7	40.3	17.5
	Iron	55,000	mg/kg	10,000	13,400	9,240	6,160
	Lead	400	mg/kg	106	107	79.5	67.7
	Magnesium	NE	mg/kg	14,300	13,000	16,900	14,700
	Manganese	1,800	mg/kg	247	308	222	159
	Mercury	5.6	mg/kg	ND	ND	ND	0.12
	Nickel	1,500	mg/kg	11.2	20.7	8.5 J	6
	Potassium	NE	mg/kg	ND	ND	ND	ND
	Selenium	390	mg/kg	286 J+	356 J+	ND	ND
	Vanadium	390	mg/kg	12.4	12.1	8.2 J	7
	Zinc	23,000	mg/kg	212	203	134	118
PAH's	2-Methylnaphthalene	310,000	ug/kg	120	67	21	8.9
	Acenaphthene	3,400,000	ug/kg	9.3	7.1	2.8 J	1.7 J
	Acenaphthylene	NE	ug/kg	12	15	2.8 J	1.5 J
	Anthracene	17,000,000	ug/kg	41	37	10	8.8
	Benzo(a)anthracene	150	ug/kg	130	130	42 J	53
	Benzo(a)pyrene	97	ug/kg	**130**	**130**	47	52
	Benzo(b)fluoranthene	160	ug/kg	**270**	**340**	88	83
	Benzo(g,h,i)perylene	NE	ug/kg	110	110	38	34
	Benzo(k)fluoranthene	1,500	ug/kg	79	85	29	22
	Chrysene	15,000	ug/kg	220	190	64	62
	Dibenz(a,h)anthracene	26	ug/kg	**35**	**39**	11	9.9
	Fluoranthene	2,300,000	ug/kg	370	260	110	110
	Fluorene	2,300,000	ug/kg	11	8.5	4.2 J	8.4 J
	Indeno(1,2,3-CD)pyrene	150	ug/kg	110	100	41	35
	Naphthalene	3,600	ug/kg	66	55	17	8.1
	Phenanthrene	NE	ug/kg	360	220	84	73
	Pyrene	1,700,000	ug/kg	280	300	92	110 J

Notes:

Bold/Shaded values indicate a **SSL exceedance**

PAH	Polycyclic aromatic hydrocarbon
SSL	Soil screening level
NE	SSL not established
J	Estimated result
J-	Underestimated result
J+	Overestimated result
µg/kg	Microgram per kilogram
mg/kg	Milligram per kilogram
ND	Analyte Not Detected in this sample

ATTACHMENT 1

LABORATORY REPORTING FORMS

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

148086-A-0-6

EPA SAMPLE NO.

ME4XR8

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-01

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 75.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4800			P
7440-36-0	Antimony	1.5	J	N*	P
7440-38-2	Arsenic	5.3		N*	P
7440-39-3	Barium	62.7			P
7440-41-7	Beryllium	0.36	J		P
7440-43-9	Cadmium	0.85			P
7440-70-2	Calcium	23300		*	P
7440-47-3	Chromium	13.2		N*	P
7440-48-4	Cobalt	3.5	J		P
7440-50-8	Copper	41.8		*	P
7439-89-6	Iron	14100		*	P
7439-92-1	Lead	87.7		*	P
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	228		*	P
7439-97-6	Mercury	0.16		N	CV
7440-02-0	Nickel	11.7		*	P
7440-09-7	Potassium	633			P
7782-49-2	Selenium	4.4	U		P
7440-22-4	Silver	1.3	U		P
7440-23-5	Sodium	242	J		P
7440-28-0	Thallium	3.2	U		P
7440-62-2	Vanadium	14.1			P
7440-66-6	Zinc	146		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

148086-A-0-6-D

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR9

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-02

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 85.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4780			P
7440-36-0	Antimony	1.0	J	N*	P
7440-38-2	Arsenic	5.1		N*	P
7440-39-3	Barium	49.2			P
7440-41-7	Beryllium	0.32	J		P
7440-43-9	Cadmium	0.67			P
7440-70-2	Calcium	24100		*	P
7440-47-3	Chromium	11.0		N*	P
7440-48-4	Cobalt	3.2	J		P
7440-50-8	Copper	32.9		*	P
7439-89-6	Iron	8670		*	P
7439-92-1	Lead	73.5		*	P
7439-95-4	Magnesium	11200			P
7439-96-5	Manganese	196		*	P
7439-97-6	Mercury	0.12	U	N	CV
7440-02-0	Nickel	10.1		*	P
7440-09-7	Potassium	614			P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	162	J		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	12.8			P
7440-66-6	Zinc	131		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS0

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-03

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 85.3

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4530			P
7440-36-0	Antimony	1.1	J	N*	P
7440-38-2	Arsenic	4.5		N*	P
7440-39-3	Barium	38.8			P
7440-41-7	Beryllium	0.28	J		P
7440-43-9	Cadmium	0.58	J		P
7440-70-2	Calcium	23800		*	P
7440-47-3	Chromium	9.4		N*	P
7440-48-4	Cobalt	3.1	J		P
7440-50-8	Copper	27.1		*	P
7439-89-6	Iron	7410		*	P
7439-92-1	Lead	68.8		*	P
7439-95-4	Magnesium	12300			P
7439-96-5	Manganese	183		*	P
7439-97-6	Mercury	0.12	U	N	CV
7440-02-0	Nickel	9.7		*	P
7440-09-7	Potassium	501	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	167	J		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	12.1			P
7440-66-6	Zinc	123		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

148086-A-6-12-D

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS1

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-04

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 87.8

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3740			P
7440-36-0	Antimony	1.2	J	N*	P
7440-38-2	Arsenic	4.0		N*	P
7440-39-3	Barium	35.9			P
7440-41-7	Beryllium	0.27	J		P
7440-43-9	Cadmium	0.52	J		P
7440-70-2	Calcium	23100		*	P
7440-47-3	Chromium	8.1		N*	P
7440-48-4	Cobalt	2.8	J		P
7440-50-8	Copper	24.1		*	P
7439-89-6	Iron	7130		*	P
7439-92-1	Lead	60.3		*	P
7439-95-4	Magnesium	11800			P
7439-96-5	Manganese	171		*	P
7439-97-6	Mercury	0.11	U	N	CV
7440-02-0	Nickel	8.2		*	P
7440-09-7	Potassium	429	J		P
7782-49-2	Selenium	3.9	U		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	163	J		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	10.9			P
7440-66-6	Zinc	106		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS2

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-05

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 84.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2380			P
7440-36-0	Antimony	1.7	J	N*	P
7440-38-2	Arsenic	3.4		N*	P
7440-39-3	Barium	20.5	J		P
7440-41-7	Beryllium	0.18	J		P
7440-43-9	Cadmium	0.40	J		P
7440-70-2	Calcium	29500		*	P
7440-47-3	Chromium	5.2		N*	P
7440-48-4	Cobalt	2.3	J		P
7440-50-8	Copper	15.4		*	P
7439-89-6	Iron	4940		*	P
7439-92-1	Lead	45.9		*	P
7439-95-4	Magnesium	14800			P
7439-96-5	Manganese	162		*	P
7439-97-6	Mercury	0.055	J	N	CV
7440-02-0	Nickel	5.3		*	P
7440-09-7	Potassium	286	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	184	J		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	8.3			P
7440-66-6	Zinc	90.1		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS3

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-06

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 87.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2040			P
7440-36-0	Antimony	1.7	J	N*	P
7440-38-2	Arsenic	2.9		N*	P
7440-39-3	Barium	17.9	J		P
7440-41-7	Beryllium	0.16	J		P
7440-43-9	Cadmium	0.59			P
7440-70-2	Calcium	34300		*	P
7440-47-3	Chromium	8.3		N*	P
7440-48-4	Cobalt	2.2	J		P
7440-50-8	Copper	16.5		*	P
7439-89-6	Iron	4740		*	P
7439-92-1	Lead	28.5		*	P
7439-95-4	Magnesium	16900			P
7439-96-5	Manganese	182		*	P
7439-97-6	Mercury	0.048	J	N	CV
7440-02-0	Nickel	5.0		*	P
7440-09-7	Potassium	277	J		P
7782-49-2	Selenium	3.9	U		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	181	J		P
7440-28-0	Thallium	2.8	U		P
7440-62-2	Vanadium	7.1			P
7440-66-6	Zinc	76.2		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS4

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-07

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 84.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3070			P
7440-36-0	Antimony	1.9	J	N*	P
7440-38-2	Arsenic	4.8		N*	P
7440-39-3	Barium	76.3			P
7440-41-7	Beryllium	0.37	J		P
7440-43-9	Cadmium	1.1			P
7440-70-2	Calcium	91900		D*	P
7440-47-3	Chromium	12.9		N*	P
7440-48-4	Cobalt	2.8	J		P
7440-50-8	Copper	57.1		*	P
7439-89-6	Iron	15200		*	P
7439-92-1	Lead	120		*	P
7439-95-4	Magnesium	54500		D	P
7439-96-5	Manganese	276		*	P
7439-97-6	Mercury	0.10	J	N	CV
7440-02-0	Nickel	10.1		*	P
7440-09-7	Potassium	394	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	263	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	11.3			P
7440-66-6	Zinc	189		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

148086-B-6-12

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS5

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-08

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 85.6

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4150			P
7440-36-0	Antimony	2.0	J	N*	P
7440-38-2	Arsenic	6.6		N*	P
7440-39-3	Barium	484			P
7440-41-7	Beryllium	0.56	J		P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	17800		*	P
7440-47-3	Chromium	17.2		N*	P
7440-48-4	Cobalt	3.3	J		P
7440-50-8	Copper	71.9		*	P
7439-89-6	Iron	21900		*	P
7439-92-1	Lead	162		*	P
7439-95-4	Magnesium	8510			P
7439-96-5	Manganese	326		*	P
7439-97-6	Mercury	0.19		N	CV
7440-02-0	Nickel	13.4		*	P
7440-09-7	Potassium	417	J		P
7782-49-2	Selenium	0.61	J		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	268	J		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	15.1			P
7440-66-6	Zinc	317		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

148086-B-12-18

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS6

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-09

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 85.4

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4380			P
7440-36-0	Antimony	2.6	J	N*	P
7440-38-2	Arsenic	6.5		N*	P
7440-39-3	Barium	88.1			P
7440-41-7	Beryllium	0.57			P
7440-43-9	Cadmium	1.2			P
7440-70-2	Calcium	26500		*	P
7440-47-3	Chromium	20.8		N*	P
7440-48-4	Cobalt	3.3	J		P
7440-50-8	Copper	73.2		*	P
7439-89-6	Iron	19700		*	P
7439-92-1	Lead	159		*	P
7439-95-4	Magnesium	11900			P
7439-96-5	Manganese	551		*	P
7439-97-6	Mercury	0.15		N	CV
7440-02-0	Nickel	11.4		*	P
7440-09-7	Potassium	487	J		P
7782-49-2	Selenium	4.0	U		P
7440-22-4	Silver	1.1	U		P
7440-23-5	Sodium	306	J		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	16.4			P
7440-66-6	Zinc	196		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

US EPA - CLP

1A-IN

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XS7

Lab Name: COMPUCHEM Contract: EPW08067

Lab Code: LIBRTY Case No.: 40408 NRAS No.: SDG NO.: ME4XR8

Matrix (soil/water): SOIL Lab Sample ID: 1008081-10

Level (low/med): LOW Date Received: 08/16/2010

% Solids: 82.1

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4570			P
7440-36-0	Antimony	1.4	J	N*	P
7440-38-2	Arsenic	5.0		N*	P
7440-39-3	Barium	73.6			P
7440-41-7	Beryllium	0.54	J		P
7440-43-9	Cadmium	1.0			P
7440-70-2	Calcium	54100		D*	P
7440-47-3	Chromium	21.3		N*	P
7440-48-4	Cobalt	2.9	J		P
7440-50-8	Copper	39.3		*	P
7439-89-6	Iron	14900		*	P
7439-92-1	Lead	132		*	P
7439-95-4	Magnesium	25800			P
7439-96-5	Manganese	618		*	P
7439-97-6	Mercury	0.11	J	N	CV
7440-02-0	Nickel	10.0		*	P
7440-09-7	Potassium	514	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U		P
7440-23-5	Sodium	272	J		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	17.4			P
7440-66-6	Zinc	178		N*	P

Color Before: BROWN Clarity Before: Texture: MEDIUM

Color After: YELLOW Clarity After: Artifacts:

Comments:

148086-C-0-6

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XQ8

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XN2

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012611-17

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 82.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2860			P
7440-36-0	Antimony	7.1	U		P
7440-38-2	Arsenic	7.3			P
7440-39-3	Barium	37.6		*	P
7440-41-7	Beryllium	0.28	J		P
7440-43-9	Cadmium	0.94			P
7440-70-2	Calcium	28500			P
7440-47-3	Chromium	10.6			P
7440-48-4	Cobalt	3.9	J		P
7440-50-8	Copper	36.4			P
7439-89-6	Iron	10000			P
7439-92-1	Lead	106			P
7439-95-4	Magnesium	14300			P
7439-96-5	Manganese	247			P
7439-97-6	Mercury	0.092	J		CV
7440-02-0	Nickel	11.2			P
7440-09-7	Potassium	286	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	592	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	12.4			P
7440-66-6	Zinc	212			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XQ9

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XN2

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012611-18

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 80.0

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3790			P
7440-36-0	Antimony	7.3	U		P
7440-38-2	Arsenic	9.8			P
7440-39-3	Barium	44.9		*	P
7440-41-7	Beryllium	0.34	J		P
7440-43-9	Cadmium	0.95			P
7440-70-2	Calcium	26400			P
7440-47-3	Chromium	14.5			P
7440-48-4	Cobalt	5.1	J		P
7440-50-8	Copper	55.7			P
7439-89-6	Iron	13400			P
7439-92-1	Lead	107			P
7439-95-4	Magnesium	13000			P
7439-96-5	Manganese	308			P
7439-97-6	Mercury	0.10	J		CV
7440-02-0	Nickel	20.7			P
7440-09-7	Potassium	356	J		P
7782-49-2	Selenium	4.2	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	607	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	12.1			P
7440-66-6	Zinc	203			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR0

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XN2

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012611-19

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 80.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2290			P
7440-36-0	Antimony	3.7	J		P
7440-38-2	Arsenic	11.0			P
7440-39-3	Barium	27.0		*	P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.63			P
7440-70-2	Calcium	33600			P
7440-47-3	Chromium	6.4			P
7440-48-4	Cobalt	3.7	J		P
7440-50-8	Copper	40.3			P
7439-89-6	Iron	9240			P
7439-92-1	Lead	79.5			P
7439-95-4	Magnesium	16900			P
7439-96-5	Manganese	222			P
7439-97-6	Mercury	0.084	J		CV
7440-02-0	Nickel	8.5			P
7440-09-7	Potassium	612	U		P
7782-49-2	Selenium	4.3	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	612	U		P
7440-28-0	Thallium	3.1	U		P
7440-62-2	Vanadium	8.2			P
7440-66-6	Zinc	134			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR1

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-01

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 82.5

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2070			P
7440-36-0	Antimony	2.9	J		P
7440-38-2	Arsenic	6.8			P
7440-39-3	Barium	19.7	J		P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.46	J		P
7440-70-2	Calcium	27700			P
7440-47-3	Chromium	5.4			P
7440-48-4	Cobalt	2.6	J		P
7440-50-8	Copper	17.5			P
7439-89-6	Iron	6160			P
7439-92-1	Lead	67.7			P
7439-95-4	Magnesium	14700			P
7439-96-5	Manganese	159		*	P
7439-97-6	Mercury	0.12			CV
7440-02-0	Nickel	6.0			P
7440-09-7	Potassium	606	U		P
7782-49-2	Selenium	4.2	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	606	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	7.0			P
7440-66-6	Zinc	118			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR2

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-02

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 83.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4320			P
7440-36-0	Antimony	7.1	U		P
7440-38-2	Arsenic	6.2			P
7440-39-3	Barium	114			P
7440-41-7	Beryllium	0.85			P
7440-43-9	Cadmium	0.92			P
7440-70-2	Calcium	39400			P
7440-47-3	Chromium	10.3			P
7440-48-4	Cobalt	3.2	J		P
7440-50-8	Copper	47.8			P
7439-89-6	Iron	16200			P
7439-92-1	Lead	145			P
7439-95-4	Magnesium	16100			P
7439-96-5	Manganese	473		*	P
7439-97-6	Mercury	0.091	J		CV
7440-02-0	Nickel	11.3			P
7440-09-7	Potassium	422	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	590	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	8.8			P
7440-66-6	Zinc	173			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.
ME4XR3

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-03

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 83.9

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2490			P
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	6.5			P
7440-39-3	Barium	46.3			P
7440-41-7	Beryllium	0.27	J		P
7440-43-9	Cadmium	0.63			P
7440-70-2	Calcium	28300			P
7440-47-3	Chromium	10.4			P
7440-48-4	Cobalt	3.5	J		P
7440-50-8	Copper	45.6			P
7439-89-6	Iron	15200			P
7439-92-1	Lead	98.3			P
7439-95-4	Magnesium	15300			P
7439-96-5	Manganese	234		*	P
7439-97-6	Mercury	0.085	J		CV
7440-02-0	Nickel	10.9			P
7440-09-7	Potassium	361	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	584	U		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	9.3			P
7440-66-6	Zinc	157			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR4

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-04

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 78.2

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	5410			P
7440-36-0	Antimony	7.5	U		P
7440-38-2	Arsenic	9.1			P
7440-39-3	Barium	72.5			P
7440-41-7	Beryllium	0.49	J		P
7440-43-9	Cadmium	0.85			P
7440-70-2	Calcium	19900			P
7440-47-3	Chromium	11.9			P
7440-48-4	Cobalt	5.1	J		P
7440-50-8	Copper	44.9			P
7439-89-6	Iron	14500			P
7439-92-1	Lead	73.0			P
7439-95-4	Magnesium	8230			P
7439-96-5	Manganese	247		*	P
7439-97-6	Mercury	0.11	J		CV
7440-02-0	Nickel	17.7			P
7440-09-7	Potassium	497	J		P
7782-49-2	Selenium	4.4	U		P
7440-22-4	Silver	1.3	U	N	P
7440-23-5	Sodium	627	U		P
7440-28-0	Thallium	3.1	U		P
7440-62-2	Vanadium	16.8			P
7440-66-6	Zinc	142			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

148086-D-12-18-D

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR5

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-05

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 84.4

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2620			P
7440-36-0	Antimony	7.0	U		P
7440-38-2	Arsenic	6.9			P
7440-39-3	Barium	60.1			P
7440-41-7	Beryllium	0.39	J		P
7440-43-9	Cadmium	0.87			P
7440-70-2	Calcium	29000			P
7440-47-3	Chromium	12.6			P
7440-48-4	Cobalt	3.8	J		P
7440-50-8	Copper	54.2			P
7439-89-6	Iron	19500			P
7439-92-1	Lead	131			P
7439-95-4	Magnesium	15500			P
7439-96-5	Manganese	311		*	P
7439-97-6	Mercury	0.086	J		CV
7440-02-0	Nickel	12.6			P
7440-09-7	Potassium	340	J		P
7782-49-2	Selenium	4.1	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	581	U		P
7440-28-0	Thallium	2.9	U		P
7440-62-2	Vanadium	9.9			P
7440-66-6	Zinc	181			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

148086-D-18-24

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR6

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-06

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 82.1

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1480			P
7440-36-0	Antimony	7.3	U		P
7440-38-2	Arsenic	6.2			P
7440-39-3	Barium	23.5	J		P
7440-41-7	Beryllium	0.61	U		P
7440-43-9	Cadmium	0.32	J		P
7440-70-2	Calcium	34900			P
7440-47-3	Chromium	7.8			P
7440-48-4	Cobalt	3.2	J		P
7440-50-8	Copper	20.7			P
7439-89-6	Iron	12000			P
7439-92-1	Lead	45.8			P
7439-95-4	Magnesium	18500			P
7439-96-5	Manganese	203		*	P
7439-97-6	Mercury	0.058	J		CV
7440-02-0	Nickel	8.2			P
7440-09-7	Potassium	609	U		P
7782-49-2	Selenium	4.3	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	609	U		P
7440-28-0	Thallium	3.0	U		P
7440-62-2	Vanadium	7.2			P
7440-66-6	Zinc	68.4			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

USEPA - CLP

1A-IN
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

ME4XR7

Lab Name: A4 SCIENTIFIC, INC. Contract: EPW08063

Lab Code: A4 Case No.: 40408 NRAS No.: SDG No.: ME4XK6

Matrix: (Soil/Water) SOIL Lab Sample ID: 0012612-07

Level: (low/med) LOW Date Received: 08/13/2010

% Solids 80.5

Concentration Units (ug/L or mg/kg dry weight): mg/Kg

CAS NO.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1400			P
7440-36-0	Antimony	7.5	U		P
7440-38-2	Arsenic	7.7			P
7440-39-3	Barium	19.9	J		P
7440-41-7	Beryllium	0.62	U		P
7440-43-9	Cadmium	0.28	J		P
7440-70-2	Calcium	33600			P
7440-47-3	Chromium	6.6			P
7440-48-4	Cobalt	3.3	J		P
7440-50-8	Copper	30.1			P
7439-89-6	Iron	15500			P
7439-92-1	Lead	42.4			P
7439-95-4	Magnesium	17400			P
7439-96-5	Manganese	227		*	P
7439-97-6	Mercury	0.070	J		CV
7440-02-0	Nickel	6.5			P
7440-09-7	Potassium	621	U		P
7782-49-2	Selenium	4.3	U		P
7440-22-4	Silver	1.2	U	N	P
7440-23-5	Sodium	621	U		P
7440-28-0	Thallium	3.1	U		P
7440-62-2	Vanadium	6.7			P
7440-66-6	Zinc	57.5			P

Color Before: BROWN Clarity Before: CLOUDY Texture: MEDIUM

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E4XR8

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 40408 Mod. Ref No.: 1760.0 SDG No.: E4XN4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3323.01

Sample wt/vol: 30.10 (g/mL) G Lab File ID: F38557

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 08/16/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 08/16/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 09/01/2010

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	200	U
91-57-6	2-Methylnaphthalene	200	U
208-96-8	Acenaphthylene	200	U
83-32-9	Acenaphthene	200	U
86-73-7	Fluorene	200	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U

148086-A-0-6

1F - FORM I SV-SIM
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E4XR8

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 40408 Mod. Ref No.: 1760.0 SDG No.: E4XN4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3323.01

Sample wt/vol: 30.10 (g/mL) G Lab File ID: C06959

Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 08/16/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 08/16/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 08/19/2010

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	5.6	
91-57-6	2-Methylnaphthalene	7.7	
208-96-8	Acenaphthylene	33	
83-32-9	Acenaphthene	3.9	J
86-73-7	Fluorene	~~6.3~~	~~B~~ 20 U
85-01-8	Phenanthrene	47	E
120-12-7	Anthracene	20	
206-44-0	Fluoranthene	120	E
129-00-0	Pyrene	62	E
56-55-3	Benzo(a)anthracene	47	E
218-01-9	Chrysene	71	E
205-99-2	Benzo(b)fluoranthene	32	
207-08-9	Benzo(k)fluoranthene	34	
50-32-8	Benzo(a)pyrene	37	
193-39-5	Indeno(1,2,3-cd)pyrene	14	
53-70-3	Dibenzo(a,h)anthracene	9.7	
191-24-2	Benzo(g,h,i)perylene	21	

1 Cannot be separated from Diphenylamine

3A

9/20/10 MS

SOM01.2 (6/2007)

1F - FORM I SV-SIM
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E4XR8DL

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 40408 Mod. Ref No.: 1760.0 SDG No.: E4XN4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3323.01DL

Sample wt/vol: 30.10 (g/mL) G Lab File ID: C06995

Extraction: (Type) SONC

% Moisture: 16 Decanted: (Y/N) N Date Received: 08/16/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 08/16/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 08/20/2010

GPC Cleanup: (Y/N) Y pH: 7.6 Dilution Factor: 5.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	20	U
91-57-6	2-Methylnaphthalene	20	U
208-96-8	Acenaphthylene	52	D
83-32-9	Acenaphthene	20	U
86-73-7	Fluorene	~~19~~	~~D~~ B 20 U
85-01-8	Phenanthrene	58	D
120-12-7	Anthracene	23	D
206-44-0	Fluoranthene	83	D
129-00-0	Pyrene	70	D
56-55-3	Benzo(a)anthracene	44	D
218-01-9	Chrysene	64	D
205-99-2	Benzo(b)fluoranthene	63	D
207-08-9	Benzo(k)fluoranthene	32	D
50-32-8	Benzo(a)pyrene	52	D
193-39-5	Indeno(1,2,3-cd)pyrene	25	D
53-70-3	Dibenzo(a,h)anthracene	20	U
191-24-2	Benzo(g,h,i)perylene	29	D

1 Cannot be separated from Diphenylamine

9/24/10 MS

1D - FORM I SV-1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E4XR9

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 40408 Mod. Ref No.: 1760.0 SDG No.: E4XN4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3323.02

Sample wt/vol: 30.20 (g/mL) G Lab File ID: F38558

Level: (LOW/MED) LOW Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 08/16/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 08/16/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 09/01/2010

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	200	U
91-57-6	2-Methylnaphthalene	200	U
208-96-8	Acenaphthylene	200	U
83-32-9	Acenaphthene	200	U
86-73-7	Fluorene	200	U
85-01-8	Phenanthrene	200	U
120-12-7	Anthracene	200	U
206-44-0	Fluoranthene	200	U
129-00-0	Pyrene	200	U
56-55-3	Benzo(a)anthracene	200	U
218-01-9	Chrysene	200	U
205-99-2	Benzo(b)fluoranthene	200	U
207-08-9	Benzo(k)fluoranthene	200	U
50-32-8	Benzo(a)pyrene	200	U
193-39-5	Indeno(1,2,3-cd)pyrene	200	U
53-70-3	Dibenzo(a,h)anthracene	200	U
191-24-2	Benzo(g,h,i)perylene	200	U

148086-A-0-6-D

1F - FORM I SV-SIM
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
E4XR9

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 40408 Mod. Ref No.: 1760.0 SDG No.: E4XN4

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-3323.02

Sample wt/vol: 30.20 (g/mL) G Lab File ID: C06960

Extraction: (Type) SONC

% Moisture: 15 Decanted: (Y/N) N Date Received: 08/16/2010

Concentrated Extract Volume: 500 (uL) Date Extracted: 08/16/2010

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 08/19/2010

GPC Cleanup: (Y/N) Y pH: 7.5 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	3.9	U
91-57-6	2-Methylnaphthalene	6.1	
208-96-8	Acenaphthylene	28	
83-32-9	Acenaphthene	4.0	
86-73-7	Fluorene	~~5.4~~	~~B~~ 20 U
85-01-8	Phenanthrene	26	
120-12-7	Anthracene	14	
206-44-0	Fluoranthene	88	E
129-00-0	Pyrene	36	
56-55-3	Benzo(a)anthracene	31	
218-01-9	Chrysene	48	E
205-99-2	Benzo(b)fluoranthene	27	
207-08-9	Benzo(k)fluoranthene	23	
50-32-8	Benzo(a)pyrene	26	
193-39-5	Indeno(1,2,3-cd)pyrene	9.7	
53-70-3	Dibenzo(a,h)anthracene	6.9	
191-24-2	Benzo(g,h,i)perylene	18	

' Cannot be separated from Diphenylamine

9/20/10
VGS