ecology and environment, inc.
International Specialists in the Environment
720 Third Avenue, Suite 1700, Seattle, WA 98104
Tel: (206) 624-9537, Fax: (206) 621-9832

MEMORANDUM

DATE: August 22, 2008

TO: Renee Nordeen, START-3 Project Manager, E & E, Seattle, WA

FROM: Mark Woodke, START-3 Chemist, E & E, Seattle, Washington MW

SUBJ: **Organic Data Summary Check, Bremerton Gasworks Properties, Bremerton, Washington**

REF: TDD: 07-01-0008 PAN: 002233.0178.01BR

The data summary check of 3 soil samples collected from the Bremerton Gasworks Properties site located in Bremerton, Washington, has been completed. Analysis for organics (EPA CLP SOW SOM01.2) was performed by KAP Technologies, Inc., The Woodlands, Texas.

The samples were numbered:

J8K37 J8K38 J8K40

No discrepancies were noted.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue
Seattle, Washington 98101

August 19, 2008

Reply to
Attn of: OEA-095

MEMORANDUM

Subject: Data Review Report for the Volatile, Semi-Volatile Organic (SVOC / SIM) Analyses of Samples collected from the Bremerton Gasworks Brownfield Site
Case: 37435 SDGs: J8K37

From: Raymond Wu, Chemist
Office of Environmental Assessment 8/19/08

To: Joanne LaBaw, Site Assessment Manager
Office of Environmental Cleanup

CC: Renee Nordeen, Project Manager
Ecology and Environment, Inc.

The quality assurance (QA) review of the analytical data generated from the analysis of 3 soil samples collected from the above referenced site has been completed. Samples were analyzed for Volatile, Semi-Volatile (SVOC/SIM) in accordance with the USEPA Contract Laboratory Program (CLP) Statement of Work (SOW) for Organic Analyses (SOM01.2) by KAP Technologies, Inc. in The Woodlands, Texas. The following samples were evaluated in this validation report:

SDG: J8K37

J8K37 J8K38 J8K40

DATA QUALIFICATIONS

The following comments refer to the laboratory performance in meeting the Quality Control specifications outlined in the Sampling and Quality Assurance Plan July 1, 2008, prepared by Ecology and Environment, USEPA CLP SOW for Organic Analysis (SOM01.2, 05/2008), and the applicable criteria set forth in the USEPA Contract Laboratory Program's National Functional Guidelines for Organic Data Review (07/2007). The data reviews conducted on these analyses were based on the QC Forms and Sample Data Summary Forms submitted by the laboratories. Review of the raw data of the analyses was not conducted. The conclusions presented herein are based on the information provided for the review.

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Please note:

1) The original Chain of custody forms had some inconsistencies (eg. sampling date and time, missing preservation information) & they were later reconciled by the sampling contractor. Clarifications were received as emails from the sampling contractor.
2) Sample results are reported from the combination of Full Scan and SIM runs.
3) Some of the VOC, SVOC and SIM reporting limits were reported by the contract lab at higher concentration levels than those listed in the QAPP (MA 1568.0).

The samples were evaluated based on the following QC elements:

$ Holding Time
$ Method and Trip Blanks
$ Initial and Continuing Calibration
$ Surrogate Recoveries
$ Lab Control Spike Recovery
$ Target Compound and Reporting Limits
$ GC/MS Spectra Matching Criteria

Overall Assessment

All of the samples met the technical acceptance criteria for each of the QC elements listed above with the exception of the following:

Three ICALs (one VOC, one SVOC & one SIM) were evaluated in this report. They met the technical acceptance criteria for the percent relative standard deviations (%RSDs) and the minimum relative response factors (RRFs) for all target compounds and surrogates with the exception of the following:

$ The %RSD of Chloroethane (34.1%) in the VOC initial calibration exceeded the control limit of 30%. Recalculation of the %RSD indicated that it was not linear at the high end of the curve and the corresponding samples would be J/None qualified for this analyte.

$ The %RSD of 2-Hexanone (34.5%) in the VOC initial calibration exceeded the control limit of 30%. Recalculation of the %Reds indicated that it was not linear at the low end of the curve and the corresponding samples would be J/UJ qualified for this analyte.

$ The %RSD of Hexachlorocyclopentadiene (35.6%), 2,4-Dinitrophenol (36.8%) and Pentachlorophenol (37.2%) in the SVOC initial calibration exceeded the control limit of 30%. Recalculation of the %RSDs indicated that they were not linear at the low end of the curve and the corresponding samples would be J/UJ qualified for those analytes.

$ All of the CCV checks met the criteria for frequency of analysis, the SOW specified, minimum RRFs and %Ds as compared to the initial calibration with the exception of the

following:

"VOC"

Date/Time of Analysis/ Inst.	Compound	%D	Qualifier Detect/Non-detect	Associated Samples
05/28/08 20:51 B-5973 (closing ccv)	Methyl Acetate	55.6	J/None	J8K37, J8K38, J8K40

"SVOC"

Date/Time of Analysis/ Inst.	Compound	%D	Qualifier Detect/Non-detect	Associated Samples
06/12/08 22:23 G-5973 (opening ccv)	Hexachlorocyclopentadiene	-34.7	J/UJ	J8K37, J8K38, J8K40
	Pentachlorophenol	-35.2	J/UJ	"
	Di-n-octylphthalate	38.9	J/None	"
	Benzidine	33.5	J/None	"
061308 18:54 G-5973 (opening ccv)	Hexachlorocyclopentadiene	-39.1	J/UJ	"
	4,6-Dinitro-2-methylphenol	-36.0	J/UJ	"
	Di-n-octylphthalate	37.4	J/None	"

"SIM"

Date/Time of Analysis/ Inst.	Compound	%D	Qualifier Detect/Non-detect	Associated Samples
06/15/08 12:38 G-5973 (opening ccv)	Dibenzo(a,h)anthracene	30.8	J/None	J8K37, J8K38
	Acenaphthylene	29.9	J/None	J8K40

VOC DMCs (Soil)	Recovery Limits (%)	VOC DMCs (Soil)	Recovery Limits (%)
Vinyl Chloride-d3 (VCL)	68-122	1,2-Dichloropropane-d6 (DPA)	74-124
Chloroethane-d5 (CLA)	61-130	Toluene-d8 (TOL)	78-121
1,1-Dichloroethene-d2 (DCE)	45-132	Trans-1,3-Dichloropropene-d4 (TDP)	72-130
2-Butanone-d5 (BUT)	20-182	2-Hexanone-d5 (HEX)	17-184

Chloroform-d (CLF)	72-123	1,4-Dioxane-d8 (DXE)	50-150
1,2-Dichloroethane-d4 (DCA)	79-122	1,1,2,2-Tetrachloroethane-d2 (TCA)	56-161
Benzene-d6 (BEN)	80-121	1,2-Dichlorobenzene-d4 (DCZ)	70-131

All of the volatile surrogate recoveries met the applicable recovery criteria with exception of the following:

"VOC"

Sample	DMC	%Recovery	Qualification Detects/Non-detects	Associated VOCs
J8K40	BEN	78	J/UJ	Benzene
	TOL	69	J/UJ	Trichloroethene, Toluene, Tetrachloroethene, Ethylbenzene, o-Xylene, m,p-Xylene, Styrene, Isopropylbenzene

"SVOC"

SVOC DMCs (Water)	Recovery Limits (%)	SVOC DMCs (Water)	Recovery Limits (%)
Phenol-d5 (PHL)	17-103	Dimethylphthalate-d6 (DMP)	43-111
Bis-(2-chloroethyl) ether-d8 (BCE)	12-98	Acenapthylene-d8 (ACY)	20-97
2-chlorophenol-d4 (2CP)	13-101	4-Nitrophenol-d4 (4NP)	16-166
4-Methylphenol-d8 (4MP)	8-100	Fluorene-d10 (FLR)	40-108
Nitrobenzene-d5 (NBZ)	16-103	4,6-Dinitro-2-methylphenol-d2 (NMP)	1-121
2-Nitrophenol-d4 (2NP)	16-104	Anthracene-d10 (ANC)	22-98
2,4-Dichlorophenol-d3 (DCP)	23-104	Pyrene-d10 (PYR)	51-120
4-chloroaniline-d4 (4CA)	1-145	Benzo(a)pyrene-d12 (BAP)	43-111
Fluoranthene-d10 (FLN)#	50-150	2-Methylnapthalene-d10 (2MN)#	50-150

# denotes SVOC-SIM surrogates

All of the SVOC/SIM surrogate recoveries met the applicable recovery criteria.

Internal Standards

The acceptance criteria for internal standards (IS) are +/- 30 seconds for retention time (RT) shifts and -50% to 100% of the IS area as compared to the IS RT and area of the daily continuing calibration standard. All of the results met the IS area and RT shift criteria with exceptions of the following:

SIM

- J8K37 - Internal Standard #2, #3 & #4 were higher than the QC limits

The corresponding compounds were qualified as J/None. They are as follows:

- For Internal Standard #2 (Naphthalene-d8)
  2-Methylnaphthalene, Naphthalene
- For Internal Standard #3 (Acenaphthene-d10)
  Acenaphthylene, Acenaphthene, Fluorene
- For Internal Standard #4 (Phenanthrene-d10)
  Pentachlorophenol, Phenanthrene, Anthracene, Fluoranthene

The PAH data were reported for different samples as seen in the tables below:

Compound	J8K37	J8K38	J8K40
Naphthalene	SIM	SIM	SIM
2-Methylnaphthalene	SIM	SIM	SIM
Acenaphthylene	SIM	SIM	SIM
Acenaphthene	SIM	SIM	SIM
Fluorene	SIM	SIM	SIM
Pentachlorophenol	SIM	SIM	SIM
Phenanthrene	SIM	SIM	SIM
Anthracene	SIM	SIM	SIM
Fluoranthene	SIM	SIM	SIM
Pyrene	SIM	SIM	SIM
Benzo(a)anthracene	SIM	SIM	SIM
Chrysene	SIM	SIM	SIM
Benzo(b)fluoranthene	SIM	SIM	SIM
Benzo(k)fluoranthene	SIM	SIM	SIM
Benzo(a)pyrene	SIM	SIM	SIM
Indeno(1,2,3-cd)pyrene	SIM	SIM	SIM
Dibenzo(a,h)anthracene	SIM	SIM	SIM
Benzo(g,h,i)perylene	SIM	SIM	SIM

The rest of the SVOC data was obtained through full scan runs.

The data, as qualified, can be used for all purposes.

Data Qualifiers		
	U	The analyte was not detected at or above the reported result.
	J	The analyte was positively identified. The associated numerical result is an estimate.
	UJ	The analyte was not detected at or above the reported estimated result. The associated numerical value is an estimate of the quantitation limit of the analyte in this sample.
	R	The data are unusable for all purposes.
	N	There is evidence the analyte is present in this sample.
	JN	There is evidence that the analyte is present. The associated numerical result is an estimate.

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 5.100 (g/mL) G Lab File ID: B16467

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 22 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1.3	U
74-87-3	Chloromethane	1.3	U
75-01-4	Vinyl chloride	1.3	U
74-83-9	Bromomethane	1.3	U
75-00-3	Chloroethane	1.3	U
75-69-4	Trichlorofluoromethane	1.3	U
75-35-4	1,1-Dichloroethene	1.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.3	U
67-64-1	Acetone	6.3	U
75-15-0	Carbon disulfide	1.3	U
79-20-9	Methyl acetate	1.3	U
75-09-2	Methylene chloride	1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	U
1634-04-4	Methyl tert-butyl ether	1.3	U
75-34-3	1,1-Dichloroethane	1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	U
78-93-3	2-Butanone	6.3	U
74-97-5	Bromochloromethane	1.3	U
67-66-3	Chloroform	1.3	U
71-55-6	1,1,1-Trichloroethane	1.3	U
110-82-7	Cyclohexane	1.3	U
56-23-5	Carbon tetrachloride	1.3	U
71-43-2	Benzene	1.3	U
107-06-2	1,2-Dichloroethane	1.3	U
123-91-1	1,4-Dioxane	130	U
79-01-6	Trichloroethene	1.3	U
108-87-2	Methylcyclohexane	1.3	U
78-87-5	1,2-Dichloropropane	1.3	U
75-27-4	Bromodichloromethane	1.3	U
10061-01-5	cis-1,3-Dichloropropene	1.3	U
108-10-1	4-Methyl-2-pentanone	6.3	U
108-88-3	Toluene	1.3	U
10061-02-6	trans-1,3-Dichloropropene	1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	U

SOM01.2 (6/2007) 8/18/08

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 5.100 (g/mL) G Lab File ID: B16467

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 22 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	1.3	U
591-78-6	2-Hexanone	6.3	UJ
124-48-1	Dibromochloromethane	1.3	U
106-93-4	1,2-Dibromoethane	1.3	U
108-90-7	Chlorobenzene	1.3	U
100-41-4	Ethylbenzene	1.3	U
95-47-6	o-Xylene	1.3	U
179601-23-1	m,p-Xylene	1.3	U
100-42-5	Styrene	1.3	U
75-25-2	Bromoform	1.3	U
98-82-8	Isopropylbenzene	1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	U
95-50-1	1,2-Dichlorobenzene	1.3	U
96-12-8	1,2-Dibromo-3-chloropropane	1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	U
87-68-3	Hexachlorobutadiene	1.3	U
67-72-1	Hexachloroethane	2.5	U
91-20-3	Naphthalene	1.3	U
630-20-6	1,1,1,2-Tetrachloroethane	1.3	U
96-18-4	1,2,3-Trichloropropane	1.3	U

8/18/08

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 5.100 (g/mL) G Lab File ID: B16467

Level: (TRACE or LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 22 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	11.11	6.5	JN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A	6.0	JN

[1] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/18/08

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 100.1 (g/mL) G Lab File ID: G0873

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

% Moisture: 22 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	26	U
108-95-2	Phenol	26	U
111-44-4	Bis(2-chloroethyl)ether	26	U
95-57-8	2-Chlorophenol	26	U
95-48-7	2-Methylphenol	26	U
108-60-1	2,2'-Oxybis(1-chloropropane)	26	U
98-86-2	Acetophenone	26	U
106-44-5	4-Methylphenol	26	U
621-64-7	N-Nitroso-di-n-propylamine	26	U
67-72-1	Hexachloroethane	26	U
98-95-3	Nitrobenzene	26	U
78-59-1	Isophorone	26	U
88-75-5	2-Nitrophenol	26	U
105-67-9	2,4-Dimethylphenol	26	U
111-91-1	Bis(2-chloroethoxy)methane	26	U
120-83-2	2,4-Dichlorophenol	26	U
91-20-3	Naphthalene	26	U
106-47-8	4-Chloroaniline	26	U
87-68-3	Hexachlorobutadiene	26	UJ
105-60-2	Caprolactam	26	U
59-50-7	4-Chloro-3-methylphenol	26	U
91-57-6	2-Methylnaphthalene	26	U
77-47-4	Hexachlorocyclopentadiene	64	U
88-06-2	2,4,6-Trichlorophenol	26	U
95-95-4	2,4,5-Trichlorophenol	26	U
92-52-4	1,1'-Biphenyl	26	U
91-58-7	2-Chloronaphthalene	26	U
88-74-4	2-Nitroaniline	51	U
131-11-3	Dimethylphthalate	26	U
606-20-2	2,6-Dinitrotoluene	26	U
208-96-8	Acenaphthylene	26	U
99-09-2	3-Nitroaniline	51	U
83-32-9	Acenaphthene	26	U
51-28-5	2,4-Dinitrophenol	130	UJ
100-02-7	4-Nitrophenol	51	U
132-64-9	Dibenzofuran	26	U
121-14-2	2,4-Dinitrotoluene	26	U

8/19/08

SOM01.2 (6/2007)

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 100.1 (g/mL) G Lab File ID: G0873

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

% Moisture: 22 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
84-66-2	Diethylphthalate	26	U
86-73-7	Fluorene	26	U
7005-72-3	4-Chlorophenyl-phenylether	26	U
100-01-6	4-Nitroaniline	51	U
534-52-1	4,6-Dinitro-2-methylphenol	51	UJ
86-30-6	N-Nitrosodiphenylamine [1]	26	U
95-94-3	1,2,4,5-Tetrachlorobenzene	26	U
101-55-3	4-Bromophenyl-phenylether	26	U
118-74-1	Hexachlorobenzene	26	U
1912-24-9	Atrazine	26	U
87-86-5	Pentachlorophenol	26	UJ
85-01-8	Phenanthrene	26	U
120-12-7	Anthracene	26	U
86-74-8	Carbazole	26	U
84-74-2	Di-n-butylphthalate	26	U
206-44-0	Fluoranthene	26	U
129-00-0	Pyrene	26	U
85-68-7	Butylbenzylphthalate	16	J
91-94-1	3,3'-Dichlorobenzidine	26	U
56-55-3	Benzo(a)anthracene	26	U
218-01-9	Chrysene	26	U
117-81-7	Bis(2-ethylhexyl)phthalate	240	
117-84-0	Di-n-octylphthalate	26	U
205-99-2	Benzo(b)fluoranthene	26	U
207-08-9	Benzo(k)fluoranthene	26	U
50-32-8	Benzo(a)pyrene	26	U
193-39-5	Indeno(1,2,3-cd)pyrene	26	U
53-70-3	Dibenzo(a,h)anthracene	26	U
191-24-2	Benzo(g,h,i)perylene	26	U
58-90-2	2,3,4,6-Tetrachlorophenol	26	U
92-87-5	Benzidine	26	U
95-50-1	1,2-Dichlorobenzene	26	U
106-46-7	1,4-Dichlorobenzene	26	U
541-73-1	1,3-Dichlorobenzene	26	U
62-75-9	N-Nitrosodimethylamine	26	U
95-63-6	1,2,4-Trimethylbenzene	26	U
108-67-8	1,3,5-Trimethylbenzene	26	U

[1] Cannot be separated from Diphenylamine

8/19/08

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 100.1 (g/mL) G Lab File ID: G0873

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

% Moisture: 22 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.28	70	JN
02		Unknown-02	2.31	83	J
03		Unknown-03	2.47	58	J
04		Unknown-04	2.59	54	J
05		Unknown-05	2.70	58	J
06		Unknown-06	3.09	230	J
07		Unknown-07	4.42	65	J
08		Unknown-08	4.91	85	J
09		Unknown-09	8.17	130	J
10		Unknown-10	8.61	150	J
11		Unknown-11	10.17	94	J
12	000080-53-5	Cyclohexanemethanol, 4-hydrox	10.29	790	NJ
13		Unknown-12	10.59	280	JN
14		Unknown-13	12.89	65	JN
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/19/08

1F - FORM I SV-SIM

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K37

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.08

Sample wt/vol: 100.1 (g/mL) G Lab File ID: G0951

Extraction: (Type) SONC

% Moisture: 22 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/15/2008

GPC Cleanup: (Y/N) Y pH: 6.1 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	1.3	U
91-57-6	2-Methylnaphthalene	1.3	U
208-96-8	Acenaphthylene	1.3	U
83-32-9	Acenaphthene	1.3	U
86-73-7	Fluorene	1.3	U
87-86-5	Pentachlorophenol	2.6	U
85-01-8	Phenanthrene	1.3	U
120-12-7	Anthracene	1.3	U
206-44-0	Fluoranthene	1.3	U
129-00-0	Pyrene	1.3	U
56-55-3	Benzo(a)anthracene	1.3	U
218-01-9	Chrysene	1.3	U
205-99-2	Benzo(b)fluoranthene	1.3	U
207-08-9	Benzo(k)fluoranthene	1.3	U
50-32-8	Benzo(a)pyrene	1.3	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.3	U
53-70-3	Dibenzo(a,h)anthracene	1.3	U
191-24-2	Benzo(g,h,i)perylene	1.3	U

1 Cannot be separated from Diphenylamine

8/19/08

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 6.100 (g/mL) G Lab File ID: B16468

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 10 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	0.91	U
74-87-3	Chloromethane	0.91	U
75-01-4	Vinyl chloride	0.91	U
74-83-9	Bromomethane	0.91	U
75-00-3	Chloroethane	0.91	U
75-69-4	Trichlorofluoromethane	0.91	U
75-35-4	1,1-Dichloroethene	0.91	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.91	U
67-64-1	Acetone	4.6	U
75-15-0	Carbon disulfide	0.91	U
79-20-9	Methyl acetate	0.91	U
75-09-2	Methylene chloride	0.91 ~~0.87~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	0.91	U
1634-04-4	Methyl tert-butyl ether	0.91	U
75-34-3	1,1-Dichloroethane	0.91	U
156-59-2	cis-1,2-Dichloroethene	0.91	U
78-93-3	2-Butanone	4.6	U
74-97-5	Bromochloromethane	0.91	U
67-66-3	Chloroform	0.91	U
71-55-6	1,1,1-Trichloroethane	0.91	U
110-82-7	Cyclohexane	0.91	U
56-23-5	Carbon tetrachloride	0.91	U
71-43-2	Benzene	0.91	U
107-06-2	1,2-Dichloroethane	0.91	U
123-91-1	1,4-Dioxane	91	U
79-01-6	Trichloroethene	0.91	U
108-87-2	Methylcyclohexane	0.91	U
78-87-5	1,2-Dichloropropane	0.91	U
75-27-4	Bromodichloromethane	0.91	U
10061-01-5	cis-1,3-Dichloropropene	0.91	U
108-10-1	4-Methyl-2-pentanone	4.6	U
108-88-3	Toluene	0.26	~~J~~ U
10061-02-6	trans-1,3-Dichloropropene	0.91	U
79-00-5	1,1,2-Trichloroethane	0.91	U

8/18/08

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 6.100 (g/mL) G Lab File ID: B16468

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 10 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	0.91	U
591-78-6	2-Hexanone	4.6	UJ
124-48-1	Dibromochloromethane	0.91	U
106-93-4	1,2-Dibromoethane	0.91	U
108-90-7	Chlorobenzene	0.91	U
100-41-4	Ethylbenzene	0.91	U
95-47-6	o-Xylene	0.91	U
179601-23-1	m,p-Xylene	0.91	U
100-42-5	Styrene	0.91	U
75-25-2	Bromoform	0.91	U
98-82-8	Isopropylbenzene	0.91	U
79-34-5	1,1,2,2-Tetrachloroethane	0.91	U
541-73-1	1,3-Dichlorobenzene	0.91	U
106-46-7	1,4-Dichlorobenzene	0.91	U
95-50-1	1,2-Dichlorobenzene	0.91	U
96-12-8	1,2-Dibromo-3-chloropropane	0.91	U
120-82-1	1,2,4-Trichlorobenzene	4.6	U
87-61-6	1,2,3-Trichlorobenzene	4.6	U
87-68-3	Hexachlorobutadiene	0.91	U
67-72-1	Hexachloroethane	1.8	U
91-20-3	Naphthalene	0.91	U
630-20-6	1,1,1,2-Tetrachloroethane	0.91	U
96-18-4	1,2,3-Trichloropropane	0.91	U

8/18/08

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 6.100 (g/mL) G Lab File ID: B16468

Level: (TRACE or LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 10 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	4.52	3.7	JN
02		Unknown-02	11.13	5.0	JN
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A		

[1] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/18/08

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 100.9 (g/mL) G Lab File ID: G0866

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

% Moisture: 10 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	22	U
108-95-2	Phenol	22	U
111-44-4	Bis(2-chloroethyl)ether	22	U
95-57-8	2-Chlorophenol	22	U
95-48-7	2-Methylphenol	22	U
108-60-1	2,2'-Oxybis(1-chloropropane)	22	U
98-86-2	Acetophenone	22	U
106-44-5	4-Methylphenol	22	U
621-64-7	N-Nitroso-di-n-propylamine	22	U
67-72-1	Hexachloroethane	22	U
98-95-3	Nitrobenzene	22	U
78-59-1	Isophorone	22	U
88-75-5	2-Nitrophenol	22	U
105-67-9	2,4-Dimethylphenol	22	U
111-91-1	Bis(2-chloroethoxy)methane	22	U
120-83-2	2,4-Dichlorophenol	22	U
91-20-3	Naphthalene	22	U
106-47-8	4-Chloroaniline	22	U
87-68-3	Hexachlorobutadiene	22	U
105-60-2	Caprolactam	22	U
59-50-7	4-Chloro-3-methylphenol	22	U
91-57-6	2-Methylnaphthalene	22	U
77-47-4	Hexachlorocyclopentadiene	55	UJ
88-06-2	2,4,6-Trichlorophenol	22	U
95-95-4	2,4,5-Trichlorophenol	22	U
92-52-4	1,1'-Biphenyl	22	U
91-58-7	2-Chloronaphthalene	22	U
88-74-4	2-Nitroaniline	44	U
131-11-3	Dimethylphthalate	22	U
606-20-2	2,6-Dinitrotoluene	22	U
208-96-8	Acenaphthylene	22	U
99-09-2	3-Nitroaniline	44	U
83-32-9	Acenaphthene	22	U
51-28-5	2,4-Dinitrophenol	110	UJ
100-02-7	4-Nitrophenol	44	U
132-64-9	Dibenzofuran	22	U
121-14-2	2,4-Dinitrotoluene	22	U

SOM01.2 (6/2007) 8/19/08

1E - FORM I SV-2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 100.9 (g/mL) G Lab File ID: G0866

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

% Moisture: 10 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
84-66-2	Diethylphthalate	22	U
86-73-7	Fluorene	22	U
7005-72-3	4-Chlorophenyl-phenylether	22	U
100-01-6	4-Nitroaniline	44	U
534-52-1	4,6-Dinitro-2-methylphenol	44	UJ
86-30-6	N-Nitrosodiphenylamine 1	22	U
95-94-3	1,2,4,5-Tetrachlorobenzene	22	U
101-55-3	4-Bromophenyl-phenylether	22	U
118-74-1	Hexachlorobenzene	22	U
1912-24-9	Atrazine	22	U
87-86-5	Pentachlorophenol	22	UJ
85-01-8	Phenanthrene	22	U
120-12-7	Anthracene	22	U
86-74-8	Carbazole	22	U
84-74-2	Di-n-butylphthalate	22	U
206-44-0	Fluoranthene	22	U
129-00-0	Pyrene	22	U
85-68-7	Butylbenzylphthalate	22	U
91-94-1	3,3'-Dichlorobenzidine	22	U
56-55-3	Benzo(a)anthracene	22	U
218-01-9	Chrysene	22	U
117-81-7	Bis(2-ethylhexyl)phthalate	82	
117-84-0	Di-n-octylphthalate	22	U
205-99-2	Benzo(b)fluoranthene	22	U
207-08-9	Benzo(k)fluoranthene	22	U
50-32-8	Benzo(a)pyrene	22	U
193-39-5	Indeno(1,2,3-cd)pyrene	22	U
53-70-3	Dibenzo(a,h)anthracene	22	U
191-24-2	Benzo(g,h,i)perylene	22	U
58-90-2	2,3,4,6-Tetrachlorophenol	22	U
92-87-5	Benzidine	22	U
95-50-1	1,2-Dichlorobenzene	22	U
106-46-7	1,4-Dichlorobenzene	22	U
541-73-1	1,3-Dichlorobenzene	22	U
62-75-9	N-Nitrosodimethylamine	22	U
95-63-6	1,2,4-Trimethylbenzene	22	U
108-67-8	1,3,5-Trimethylbenzene	22	U

1 Cannot be separated from Diphenylamine

8/19/08

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 100.9 (g/mL) G Lab File ID: G0866

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

% Moisture: 10 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.31	90	JN
02		Unknown-02	2.77	48	J
03		Unknown-03	3.09	180	J
04		Unknown-04	4.42	48	J
05		Unknown-05	4.92	70	J
06		Unknown-06	8.12	59	J
07		Unknown-07	8.61	73	J
08		Unknown-08	10.11	51	J
09		Unknown-09	10.16	67	J
10	000080-53-5	Cyclohexanemethanol, 4-hydrox	10.28	320	NJ
11		Unknown-10	10.59	80	JN
12		Unknown-11	17.95	59	JN
13	000111-02-4	2,6,10,14,18,22-Tetracosahexa	18.23	48	NJ
14		Unknown-12	21.03	62	JN
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/19/08

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

EPA SAMPLE NO.
J8K38

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.09

Sample wt/vol: 100.9 (g/mL) G Lab File ID: G0954

Extraction: (Type) SONC

% Moisture: 10 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/15/2008

GPC Cleanup: (Y/N) Y pH: 5.3 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	1.1	U
91-57-6	2-Methylnaphthalene	1.1	U
208-96-8	Acenaphthylene	1.1	U
83-32-9	Acenaphthene	1.1	U
86-73-7	Fluorene	1.1	U
87-86-5	Pentachlorophenol	2.2	U
85-01-8	Phenanthrene	1.1	U
120-12-7	Anthracene	1.1	U
206-44-0	Fluoranthene	1.1	U
129-00-0	Pyrene	1.1	U
56-55-3	Benzo(a)anthracene	1.1	U
218-01-9	Chrysene	1.1	U
205-99-2	Benzo(b)fluoranthene	1.1	U
207-08-9	Benzo(k)fluoranthene	1.1	U
50-32-8	Benzo(a)pyrene	1.1	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.1	U
53-70-3	Dibenzo(a,h)anthracene	1.1	U
191-24-2	Benzo(g,h,i)perylene	1.1	U

[1] Cannot be separated from Diphenylamine

8/19/08

SOM01.2 (6/2007)

1A - FORM I VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 5.600 (g/mL) G Lab File ID: B16469

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 18 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
75-71-8	Dichlorodifluoromethane	1.1	U
74-87-3	Chloromethane	1.1	U
75-01-4	Vinyl chloride	1.1	U
74-83-9	Bromomethane	1.1	U
75-00-3	Chloroethane	1.1	U
75-69-4	Trichlorofluoromethane	1.1	U
75-35-4	1,1-Dichloroethene	1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	U
67-64-1	Acetone	16	
75-15-0	Carbon disulfide	1.1	U
79-20-9	Methyl acetate	1.1	U
75-09-2	Methylene chloride	1.1 ~~0.79~~	~~JB~~ U
156-60-5	trans-1,2-Dichloroethene	1.1	U
1634-04-4	Methyl tert-butyl ether	1.1	U
75-34-3	1,1-Dichloroethane	1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	U
78-93-3	2-Butanone	5.4	U
74-97-5	Bromochloromethane	1.1	U
67-66-3	Chloroform	1.1	U
71-55-6	1,1,1-Trichloroethane	1.1	U
110-82-7	Cyclohexane	1.1	U
56-23-5	Carbon tetrachloride	1.1	U
71-43-2	Benzene	1.1	UJ
107-06-2	1,2-Dichloroethane	1.1	U
123-91-1	1,4-Dioxane	110	U
79-01-6	Trichloroethene	1.1	UJ
108-87-2	Methylcyclohexane	1.1	U
78-87-5	1,2-Dichloropropane	1.1	U
75-27-4	Bromodichloromethane	1.1	U
10061-01-5	cis-1,3-Dichloropropene	1.1	U
108-10-1	4-Methyl-2-pentanone	5.4	U
108-88-3	Toluene	0.99	J Q
10061-02-6	trans-1,3-Dichloropropene	1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	U

8/18/08

SOM01.2 (6/2007)

1B - FORM I VOA-2
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 5.600 (g/mL) G Lab File ID: B16469

Level: (TRACE/LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 18 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

Purge Volume: 10.0 (mL)

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
127-18-4	Tetrachloroethene	1.1	UJ
591-78-6	2-Hexanone	5.4	UJ
124-48-1	Dibromochloromethane	1.1	U
106-93-4	1,2-Dibromoethane	1.1	U
108-90-7	Chlorobenzene	1.1	U
100-41-4	Ethylbenzene	1.1	UJ
95-47-6	o-Xylene	1.1	UJ
179601-23-1	m,p-Xylene	1.1	UJ
100-42-5	Styrene	1.1	UJ
75-25-2	Bromoform	1.1	U
98-82-8	Isopropylbenzene	1.1	UJ
79-34-5	1,1,2,2-Tetrachloroethane	1.1	U
541-73-1	1,3-Dichlorobenzene	1.1	U
106-46-7	1,4-Dichlorobenzene	1.1	U
95-50-1	1,2-Dichlorobenzene	1.1	U
96-12-8	1,2-Dibromo-3-chloropropane	1.1	U
120-82-1	1,2,4-Trichlorobenzene	5.4	U
87-61-6	1,2,3-Trichlorobenzene	5.4	U
87-68-3	Hexachlorobutadiene	1.1	U
67-72-1	Hexachloroethane	2.2	U
91-20-3	Naphthalene	1.1	U
630-20-6	1,1,1,2-Tetrachloroethane	1.1	U
96-18-4	1,2,3-Trichloropropane	1.1	U

8/18/08

1J - FORM I VOA-TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 5.600 (g/mL) G Lab File ID: B16469

Level: (TRACE or LOW/MED) LOW Date Received: 05/21/2008

% Moisture: not dec. 18 Date Analyzed: 05/28/2008

GC Column: RTX-VMS ID: 0.25 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: ____ (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG Purge Volume: 10.0 (mL)

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	11.13	4.9	JN
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[1]	Total Alkanes	N/A	8.1	JN

[1] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/18/08

1D - FORM I SV-1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 100.2 (g/mL) G Lab File ID: G0867

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

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
100-52-7	Benzaldehyde	24	U
108-95-2	Phenol	24	U
111-44-4	Bis(2-chloroethyl)ether	24	U
95-57-8	2-Chlorophenol	24	U
95-48-7	2-Methylphenol	24	U
108-60-1	2,2'-Oxybis(1-chloropropane)	24	U
98-86-2	Acetophenone	24	U
106-44-5	4-Methylphenol	24	U
621-64-7	N-Nitroso-di-n-propylamine	24	U
67-72-1	Hexachloroethane	24	U
98-95-3	Nitrobenzene	24	U
78-59-1	Isophorone	24	U
88-75-5	2-Nitrophenol	24	U
105-67-9	2,4-Dimethylphenol	24	U
111-91-1	Bis(2-chloroethoxy)methane	24	U
120-83-2	2,4-Dichlorophenol	24	U
91-20-3	Naphthalene	24	U
106-47-8	4-Chloroaniline	24	U
87-68-3	Hexachlorobutadiene	24	U
105-60-2	Caprolactam	24	U
59-50-7	4-Chloro-3-methylphenol	24	U
91-57-6	2-Methylnaphthalene	24	U
77-47-4	Hexachlorocyclopentadiene	61	UJ
88-06-2	2,4,6-Trichlorophenol	24	U
95-95-4	2,4,5-Trichlorophenol	24	U
92-52-4	1,1'-Biphenyl	24	U
91-58-7	2-Chloronaphthalene	24	U
88-74-4	2-Nitroaniline	49	U
131-11-3	Dimethylphthalate	24	U
606-20-2	2,6-Dinitrotoluene	24	U
208-96-8	Acenaphthylene	24	U
99-09-2	3-Nitroaniline	49	U
83-32-9	Acenaphthene	24	U
51-28-5	2,4-Dinitrophenol	120	UJ
100-02-7	4-Nitrophenol	49	U
132-64-9	Dibenzofuran	24	U
121-14-2	2,4-Dinitrotoluene	24	U

8/19/08

1E - FORM I SV-2
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 100.2 (g/mL) G Lab File ID: G0867

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

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
84-66-2	Diethylphthalate	24	U
86-73-7	Fluorene	24	U
7005-72-3	4-Chlorophenyl-phenylether	24	U
100-01-6	4-Nitroaniline	49	U
534-52-1	4,6-Dinitro-2-methylphenol	49	UJ
86-30-6	N-Nitrosodiphenylamine [1]	24	U
95-94-3	1,2,4,5-Tetrachlorobenzene	24	U
101-55-3	4-Bromophenyl-phenylether	24	U
118-74-1	Hexachlorobenzene	24	U
1912-24-9	Atrazine	24	U
87-86-5	Pentachlorophenol	24	UJ
85-01-8	Phenanthrene	24	U
120-12-7	Anthracene	24	U
86-74-8	Carbazole	24	U
84-74-2	Di-n-butylphthalate	24	U
206-44-0	Fluoranthene	24	U
129-00-0	Pyrene	24	U
85-68-7	Butylbenzylphthalate	24	U
91-94-1	3,3'-Dichlorobenzidine	24	U
56-55-3	Benzo(a)anthracene	24	U
218-01-9	Chrysene	24	U
117-81-7	Bis(2-ethylhexyl)phthalate	160	
117-84-0	Di-n-octylphthalate	24	U
205-99-2	Benzo(b)fluoranthene	24	U
207-08-9	Benzo(k)fluoranthene	24	U
50-32-8	Benzo(a)pyrene	24	U
193-39-5	Indeno(1,2,3-cd)pyrene	24	U
53-70-3	Dibenzo(a,h)anthracene	24	U
191-24-2	Benzo(g,h,i)perylene	24	U
58-90-2	2,3,4,6-Tetrachlorophenol	24	U
92-87-5	Benzidine	24	U
95-50-1	1,2-Dichlorobenzene	24	U
106-46-7	1,4-Dichlorobenzene	24	U
541-73-1	1,3-Dichlorobenzene	24	U
62-75-9	N-Nitrosodimethylamine	24	U
95-63-6	1,2,4-Trimethylbenzene	24	U
108-67-8	1,3,5-Trimethylbenzene	24	U

[1] Cannot be separated from Diphenylamine

8/19/08

1K - FORM I SV-TIC
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 100.2 (g/mL) G Lab File ID: G0867

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

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) Date Analyzed: 06/13/2008

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01		Unknown-01	2.28	59	JN
02		Unknown-02	2.47	48	J
03		Unknown-03	2.70	120	J
04		Unknown-04	2.77	52	J
05		Unknown-05	3.09	190	J
06		Unknown-06	4.92	69	J
07		Unknown-07	8.14	80	J
08		Unknown-08	8.61	95	J
09	000080-53-5	Cyclohexanemethanol, 4-hydrox	10.28	480	NJ
10		Unknown-09	10.59	120	JN
11		Unknown-10	18.64	48	J
12		Unknown-11	21.32	87	J
13		Unknown-12	22.72	50	J
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
	E966796[2]	Total Alkanes	N/A		

[2] EPA-designated Registry Number.

SOM01.2 (6/2007)

8/19/08

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

EPA SAMPLE NO.
J8K40

Lab Name: KAP TECHNOLOGIES, INC. Contract: EPW05032

Lab Code: KAP Case No.: 37435 Mod. Ref No.: 1568.0 SDG No.: J8K37

Matrix: (SOIL/SED/WATER) SOIL Lab Sample ID: S-0919.10

Sample wt/vol: 100.2 (g/mL) G Lab File ID: G0972

Extraction: (Type) SONC

% Moisture: 18 Decanted: (Y/N) N Date Received: 05/21/2008

Concentrated Extract Volume: 500 (uL) Date Extracted: 05/28/2008

Injection Volume: 1.0 (uL) GPC Factor: 2.0 Date Analyzed: 06/16/2008

GPC Cleanup: (Y/N) Y pH: 5.9 Dilution Factor: 1.0

CAS No.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
91-20-3	Naphthalene	1.2	U
91-57-6	2-Methylnaphthalene	1.2	U
208-96-8	Acenaphthylene	1.2	U
83-32-9	Acenaphthene	1.2	U
86-73-7	Fluorene	1.2	U
87-86-5	Pentachlorophenol	2.4	U
85-01-8	Phenanthrene	1.2	U
120-12-7	Anthracene	1.2	U
206-44-0	Fluoranthene	1.2	U
129-00-0	Pyrene	1.2	U
56-55-3	Benzo(a)anthracene	1.2	U
218-01-9	Chrysene	1.2	U
205-99-2	Benzo(b)fluoranthene	1.2	U
207-08-9	Benzo(k)fluoranthene	1.2	U
50-32-8	Benzo(a)pyrene	1.2	U
193-39-5	Indeno(1,2,3-cd)pyrene	1.2	U
53-70-3	Dibenzo(a,h)anthracene	1.2	U
191-24-2	Benzo(g,h,i)perylene	1.2	U

[1] Cannot be separated from Diphenylamine

8/19/08

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