205256

SITE INVESTIGATION

PAPERBOARD SPECIALTIES, INC.

PATERSON, PASSAIC COUNTY

EPA ID NO.: NJD147427843

VOLUME 3 OF 3

New Jersey Department of Environmental Protection
Division of Publicly Funded Site Remediation
Environmental Measurements and Site Assessment Section

ATTACHMENT HH

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

MEMORANDUM

MAY 20 1996

TO: Kris Geller, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THRU: Greg Toffoli 5/20/96
Joseph Sanguiliano 5/20/96
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: James R. Plummer 5/20/96
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Data Validation Review of **Paperboard Specialties, Inc.**, Paterson Soil Samples. Twenty Soil Samples Analyzed for Total Petroleum Hydrocarbons (TPHC) by USEPA Method 418.1 Analyses Performed by Industrial Corrosion Management laboratory.

Field ID	Lab ID	Sampling Date
EDS-1B	226324	12/15/1995
EDS-2B	226325	12/15/1995
EDS-3B	226326	12/15/1995
WDS-1	226327	12/14/1995
WDS-2	226328	12/15/1995
WDS-3	226329	12/15/1995
P1-CS2A	226330	12/15/1995
P1-CS2B	226331	12/15/1995
P1-CS1A	226332	12/14/1995
P1-CS1B	226333	12/14/1995
EPL-1	226334	12/13/1995
EPL-3	226335	12/13/1995
EPL-4	226336	12/13/1995
EPL-2B	226337	12/13/1995

P2-CS1A	226338	12/14/1995
P2-CS1B	226339	12/14/1995
P2-CS2A	226340	12/14/1995
P2-CS2B	226341	12/14/1995
278	226342	12/14/1995
279	226343	12/15/1995

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above referenced data package according to full regulatory deliverables requirements as specified in the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. The data validation report is summarized below. A detailed data validation is available for your review.

TPHCs:

The data are acceptable.

A Target Analyte Data Summary List is not provided because the results reported by the laboratory conform to the results determined by QAS.

If you have any questions regarding this review, please do not hesitate to contact this office at 3-0752.

c: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT HH-2

ATTACHMENT II

Post-it™ telepho... BRAND

To ____ Date ____ WHILE YO... M ____ of ____ Phone No. ____ TELEPHONED ____ WAS IN TO SEE YO... WANTS TO SEE YO... RETURNED YOUR ... Message ____

ANALYSIS DATA SHEET

Sample: CUT 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [signature]
DATE ANALYZED: 03/05/96
UNITS: mg/L

CASE NUMBER: ____
QC REPORT No: ____
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
pH: 5.07
CONC/DIL/FACTOR: 1.0

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	<0.005
CARBON TETRACHLORIDE	<0.005
CHLORDANE	
CHLOROBENZENE	<0.005
CHLOROFORM	<0.005
1,4-DICHLOROBENZENE	
1,2-DICHLOROETHANE	<0.005
1,3-DICHLOROETHYLENE	<0.005
TETRACHLOROETHYLENE	<0.005
TRICHLOROETHYLENE	<0.005
VINYL CHLORIDE	<0.005
m-CRESOL	

NJDEPE FORM T-1 (7/92) REV. 4/93

ATTACHMENT II-1

TCLP ANALYSIS DATA SHEET

Sample: CUT 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 03/05/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X 210174
DATE SAMPLE RECEIVED: 02/28/96
pH: 5.07
CONC./DIL/ FACTOR: 1.0

ANALYTE	CONC.
o-CRESOL	
p-CRESOL	
CRESOL	
HEXACHLOROBENZENE	
HEXACLOR-1,3-BUTADIENE	
HEXACHLOROETHANE	
2,4-DINITROTOLUENE	
METHYL ETHYL KETONE	<0.005
NITROBENZENE	
PENTACHLOROPHENOL	
PYRIDINE	
2,4,5-TRICHLOROPHENOL	
2,4,6-TRICHLOROPHENOL	
ENDRIN	
HEPTACHLOR(AND EPOXIDE)	
LINDANE	
METHOXYCHLOR	
TOXAPHENE	
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-2

TCLP ANALYSIS DATA SHEET

Sample: CUT 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 3/15/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: XZ6174
DATE SAMPLE RECEIVED: 02/28/96
pH: 4.96
CONC./DIL. FACTOR: 5.0

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	
CARBON TETRACHLORIDE	
CHLORDANE	
CHLOROBENZENE	
CHLOROFORM	
1,4-DICHLOROBENZENE	<0.025
1,2-DICHLOROETHANE	
1,3-DICHLOROETHYLENE	
TETRACHLOROETHYLENE	
TRICHLOROETHYLENE	
VINYL CHLORIDE	
m-CRESOL	

NJDEPE FORM T-1 (7/92) REV. 4/93

ATTACHMENT II-3

TCLP ANALYSIS DATA SHEET

Sample: CUT 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 3/5/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
pH: 4.96
CONC/DIL/FACTOR: 5.0

ANALYTE	CONC.
o-CRESOL	<0.050
m& p-CRESOL	<0.050
CRESOL	
HEXACHLOROBENZENE	<0.025
HEXACLOR-1,3-BUTADIENE	<0.025
HEXACHLOROETHANE	<0.025
2,4-DINITROTOLUENE	<0.025
METHYL ETHYL KETONE	
NITROBENZENE	<0.025
PENTACHLOROPHENOL	<0.050
PYRIDINE	<0.500
2,4,5-TRICHLOROPHENOL	<0.050
2,4,6-TRICHLOROPHENOL	<0.050
ENDRIN	
HEPTACHLOR(AND EPOXIDE)	
LINDANE	
METHOXYCHLOR	
TOXAPHENE	
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-4

TCLP ANALYSIS DATA SHEET

Sample: CUT - 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [signature]
DATE ANALYZED: 3/14/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 2/28/96
pH: 4.96
CONC/DIL/FACTOR: 5

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	
CARBON TETRACHLORIDE	
CHLORDANE	<0.0025
CHLOROBENZENE	
CHLOROFORM	
1,4-DICHLOROBENZENE	
1,2-DICHLOROETHANE	
1,3-DICHLOROETHYLENE	
TETRACHLOROETHYLENE	
TRICHLOROETHYLENE	
VINYL CHLORIDE	
m-CRESOL	

NJDEPE FORM T-1 (7/92) REV. 4/93

ATTACHMENT II-5

TCLP ANALYSIS DATA SHEET

Sample: CUT - 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 3/14/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 2/28/96
pH: 4.96
CONC./DIL. FACTOR: 5

ANALYTE	CONC.
o-CRESOL	
p-CRESOL	
CRESOL	
HEXACHLOROBENZENE	
HEXACLOR-1,3-BUTADIENE	
HEXACHLOROETHANE	
2,4-DINITROTOLUENE	
METHYL ETHYL KETONE	
NITROBENZENE	
PENTACHLOROPHENOL	
PYRIDINE	
2,4,5-TRICHLOROPHENOL	
2,4,6-TRICHLOROPHENOL	
ENDRIN	<0.0005
HEPTACHLOR(AND EPOXIDE)	<0.00025
LINDANE	<0.00025
METHOXYCHLOR	<0.0025
TOXAPHENE	<0.025
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-6

GENERAL ANALYSIS DATA SHEET

Sample: CUT 1

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230176
SAMPLE MATRIX: SOIL
EXTRACTION METHOD: SW 846 CHPT 7
ANALYTICAL METHOD #: 9010
PERCENT MOISTURE: (Not Decanted) 13
DATA RELEASE AUTHORIZED BY: [illegible]
DECANTED: YES (NO) (circle one)

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
DATE EXTRACTED/PREPARED: 03/01/96
DATE ANALYZED: 03/01/96
CONC./DIL/ FACTOR: 1.00
SAMPLE WT/VOL: 10g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
Reactive Cyanide	U	U	0.23

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT II-7

TCLP ANALYSIS DATA SHEET

Sample: CUT 2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: MMO
DATE ANALYZED: 03/05/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
pH: 5.52
CONC/DIL/ FACTOR: 1.0

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	<0.005
CARBON TETRACHLORIDE	<0.005
CHLORDANE	
CHLOROBENZENE	<0.005
CHLOROFORM	<0.005
1,4-DICHLOROBENZENE	
1,2-DICHLOROETHANE	<0.005
1,3-DICHLOROETHYLENE	<0.005
TETRACHLOROETHYLENE	<0.005
TRICHLOROETHYLENE	<0.005
VINYL CHLORIDE	<0.005
m-CRESOL	

NJDEPE FORM T-1 (7/92) REV. 4/93

ATTACHMENT II-8

TCLP ANALYSIS DATA SHEET

Sample: CUT 2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 03/05/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/20/96
pH: 5.52
CONC/DIL/ FACTOR: 1.0

ANALYTE	CONC.
o-CRESOL	
p-CRESOL	
CRESOL	
HEXACHLOROBENZENE	
HEXACLOR-1,3-BUTADIENE	
HEXACHLOROETHANE	
2,4-DINITROTOLUENE	
METHYL ETHYL KETONE	<0.005
NITROBENZENE	
PENTACHLOROPHENOL	
PYRIDINE	
2,4,5-TRICHLOROPHENOL	
2,4,6-TRICHLOROPHENOL	
ENDRIN	
HEPTACHLOR(AND EPOXIDE)	
LINDANE	
METHOXYCHLOR	
TOXAPHENE	
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-9

TCLP ANALYSIS DATA SHEET

Sample: CUT 2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 3/15/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
pH: 4.99
CONC./DIL. FACTOR: 5.0

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	
CARBON TETRACHLORIDE	
CHLORDANE	
CHLOROBENZENE	
CHLOROFORM	
1,4-DICHLOROBENZENE	<0.025
1,2-DICHLOROETHANE	
1,3-DICHLOROETHYLENE	
TETRACHLOROETHYLENE	
TRICHLOROETHYLENE	
VINYL CHLORIDE	
m-CRESOL	

NJDEPE FORM T-1 (7/92) REV. 4/93

ATTACHMENT II-10

TCLP ANALYSIS DATA SHEET

Sample: CUT 2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [illegible]
DATE ANALYZED: 3/15/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
pH: 4.99
CONC/DIL/FACTOR: 5.0

ANALYTE	CONC.
o-CRESOL	<0.050
m& p-CRESOL	<0.050
CRESOL	
HEXACHLOROBENZENE	<0.025
HEXACLOR-1,3-BUTADIENE	<0.025
HEXACHLOROETHANE	<0.025
2,4-DINITROTOLUENE	<0.025
METHYL ETHYL KETONE	
NITROBENZENE	<0.025
PENTACHLOROPHENOL	<0.050
PYRIDINE	<0.500
2,4,5-TRICHLOROPHENOL	<0.050
2,4,6-TRICHLOROPHENOL	<0.050
ENDRIN	
HEPTACHLOR(AND EPOXIDE)	
LINDANE	
METHOXYCHLOR	
TOXAPHENE	
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-11

TCLP ANALYSIS DATA SHEET

Sample: CUT-2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [signature]
DATE ANALYZED: 3/14/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 2/28/96
pH: 4.99
CONC/DIL/FACTOR: 5

ANALYTE	CONC.
ARSENIC	
BARIUM	
CADMIUM	
CHROMIUM	
LEAD	
MERCURY	
SELENIUM	
SILVER	
BENZENE	
CARBON TETRACHLORIDE	
CHLORDANE	<0.0025
CHLOROBENZENE	
CHLOROFORM	
1,4-DICHLOROBENZENE	
1,2-DICHLOROETHANE	
1,3-DICHLOROETHYLENE	
TETRACHLOROETHYLENE	
TRICHLOROETHYLENE	
VINYL CHLORIDE	

NJDEP

Post-It™ Brand
To
Date
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of
Phone No.
TELEPHONED
WAS IN TO SEE YO
WANTS TO SEE YO
RETURNED YOUR C
Message

ATTACHMENT II-12

TCLP ANALYSIS DATA SHEET

Sample: CUT-2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: LEACHATE
DATA RELEASE AUTHORIZED BY: [signature]
DATE ANALYZED: 3/14/96
UNITS: mg/L

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 2/28/96
pH: 4.99
CONC./DIL. FACTOR: 5

ANALYTE	CONC.
o-CRESOL	
p-CRESOL	
CRESOL	
HEXACHLOROBENZENE	
HEXACLOR-1,3-BUTADIENE	
HEXACHLOROETHANE	
2,4-DINITROTOLUENE	
METHYL ETHYL KETONE	
NITROBENZENE	
PENTACHLOROPHENOL	
PYRIDINE	
2,4,5-TRICHLOROPHENOL	
2,4,6-TRICHLOROPHENOL	
ENDRIN	<0.0005
HEPTACHLOR(AND EPOXIDE)	<0.00025
LINDANE	<0.00025
METHOXYCHLOR	<0.0025
TOXAPHENE	<0.025
2,4-D	
2,4,5-TP (SILVEX)	

NJDEPE FORM T-2 (7/92) REV. 4/93

ATTACHMENT II-13

GENERAL ANALYSIS DATA SHEET

Sample: CUT 2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230177
SAMPLE MATRIX: SOIL
EXTRACTION METHOD: SW 846 CHPT 7
ANALYTICAL METHOD #: 9010
PERCENT MOISTURE: (Not Decanted) 13
DATA RELEASE AUTHORIZED BY: [illegible]
DECANTED: YES NO (circle one)

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
DATE EXTRACTED/PREPARED: 03/01/96
DATE ANALYZED: 03/01/96
CONC./DIL/ FACTOR: 1.00
SAMPLE WT/VOL: 10g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
Reactive Cyanide	U	U	0.23

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT II-14

ATTACHMENT JJ

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

SEP 05 1996

MEMORANDUM

TO: Kris Geller, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 9/5/96
Carol Pillsbury 9/5/96
Quality Assurance Section
Bureau of Environmental Measurements & Quality Assurance

FROM: Karanvir S. Kaushal, Research Scientist KSK 9/5/96
Quality Assurance Section
Bureau of Environmental Measurements & Quality Assurance

SUBJECT: Review of the Analytical Data Package for **Paperboard Specialties Inc., Paterson** Submitted by ICM Laboratories.

The following samples were reviewed for the listed parameters.

Field ID	Lab ID	Sample Date	Parameter	Matrix
CUT-1	230176	02-28-96	PCBs,RECRA Char	Non-aqueous
			TCLP	Non-aqueous
CUT-2	230177	02-28-96	PCBs,RECRA Char	Non-aqueous
			TCLP	Non-aqueous
NJ-23	230178	02-27 -96	VO,SV,Pest/PCBs	Non-aqueous
			Metals,Phenol,CN	Non-aqueous
			RECRA Char	Non-aqueous
BEC-1D	230179	02-27 -96	VO,SV,Pest/PCBs	Non-aqueous
			Metals,Phenol,CN	Non-aqueous
			RECRA Char	Non-aqueous
PW-2	230180	02-27 -96	VO,SV,Pest/PCBs	Non-aqueous
			Metals,Phenol,CN	Non-aqueous
			RECRA Char	Non-aqueous
FB	230181	02-27 -96	VO,SV,Pest/PCBs	Aqueous
			Metals,Phenol,CN	Aqueous
TB	230182	02-27 -96	VO	Aqueous

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples against USEPA SW-846 methodologies and the requirements established in Contract X-26174 Task

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ATTACHMENT JJ-1

III. The quality assurance review of the data is summarized below. Please refer to the data validation report and the Target Analyte Summary List for details.

The analytical data reported in this package are acceptable except for the following qualifications resulting from the noted QA/QC deficiencies.

Volatiles:

The volatiles analyses were performed according to USEPA SW-846 Method 8240.

The volatiles data were acceptable. Please note that the results for samples 230178, 230179 and 230180 are reported from a 50 fold dilution analyses. Therefore, the reported detection limits are elevated as a result of these dilutions. The positive results for sample 230178 are quantitatively qualified due to high surrogate recovery and may be biased high.

Semivolatiles:

The semivolatiles analyses were performed according to USEPA SW-846 Method 8270.

The semivolatiles data were acceptable. Please note that the results for samples 230178, 230179 and 230180 are reported from a 100 fold dilution analyses. Please note that the reported detection limits are elevated as a result of these dilutions.

PCBs:

Samples 230176 and 230177 were analyzed for PCBs according to USEPA SW-846 Method 8080.

The data for the PCBs analyses are acceptable.

Pesticides/PCBs:

The pesticides/PCBs analyses were performed according to USEPA SW-846 Method 8080.

The pesticides/PCBs data were acceptable.

Metals:

The metals analyses were performed according to USEPA SW-846 methodologies.

The metals data were acceptable.

Phenol:

The phenol analyses were performed according to USEPA SW-846 Method 9066.

The phenol data were acceptable.

ATTACHMENT JJ-2

Cyanide:

The cyanide analyses were performed according to USEPA SW-846 Method 9012.

The cyanide data were acceptable.

TCLP: (~~[illegible]~~ Toxicity Characteristic ~~[illegible]~~)

Volatiles:

The samples were analyzed for TCLP volatiles according to USEPA SW-846 Method 8240.

The TCLP volatiles data were acceptable.

Semivolatiles:

The samples were analyzed for TCLP semivolatiles according to USEPA SW 846-Method 8270.

The TCLP semivolatiles data were acceptable. The results for samples 230176 and 230177 are reported from 5 fold dilution analyses. As a result, the reported method detection limits for all TCLP semivolatile analytes are elevated but were still below the regulatory levels.

Pesticides:

The samples were analyzed for TCLP pesticides according to USEPA SW-846 Method 8080.

The TCLP pesticides data were acceptable. The results for samples 230176 and 230177 are reported from 5 fold dilution analyses. As a result, the reported method detection limits for all TCLP pesticides analytes are elevated but were still below the regulatory levels.

Herbicides:

The samples were analyzed for TCLP herbicides according to USEPA SW-846 Method 8150.

The TCLP herbicides data were acceptable. The results for samples 230176 and 230177 are reported from 20 fold dilution analyses. As a result, the reported method detection limits for all TCLP herbicides analytes are elevated but were still below the regulatory levels.

Metals:

The samples were analyzed for TCLP metals (except mercury) according to USEPA SW-846 Method 6010.

The TCLP metals data were found acceptable.

ATTACHMENT JJ-3

Corrosivity, Ignitability, Reactivity Cyanide and Reactive Sulfide:

The data for these analyses are acceptable. Please note that all samples were analyzed for the above listed RECRA characteristics analyses. Also, note that samples 230178, 30179 and 230180 were ignitable with their flashpoints ranging between 94 and 98 degrees Fahrenheit.

Should you have any questions regarding this review, please contact this office at 3-0752.

c: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT JJ-4

Target Analyte Summary List

Site Name: **Paperboard Specialties Inc., Paterson**

Sample Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnote

Please note that the positive results and only those non-detected results which require a QAS action are reported below.

230176

PCBs (ug/Kg): Target compounds not detected.

***TCLP**

Volatiles (mg/L): Target compounds not detected.

Semivolatiles (mg/L): Target compounds not detected.
(1:5 Dilution)

Pesticides (mg/L): Target compounds not detected.
(1:5 Dilution)

Herbicides (mg/L): Target compounds not detected.
(1:20 Dilution)

Metals (mg/L):

barium	U	1.6	1.6
chromium	U	0.01	0.01
lead	U	0.14	0.14

230177

PCBs (ug/Kg): Target compounds not detected.

***TCLP**

Volatiles (mg/L): Target compounds not detected.

Semivolatiles (mg/L): Target compounds not detected.
(1:5 Dilution)

Pesticides (mg/L): Target compounds not detected.
(1:5 Dilution)

ATTACHMENT JJ-5

Sample Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Herbicides (mg/L): (1:20 Dilution)	Target compounds not detected.				
Metals (mg/L):					
barium	U	1.0	1.0		
chromium	U	0.01	0.01		
lead	U	0.07	0.07		
230178					
Volatiles (ug/Kg): (1:50 Dilution)					
benzene	U	690	690J	qualify	1
toluene	U	700	700J	qualify	1
ethylbenzene	U	1900	1900J	qualify	1
total xylenes	U	8300	8300J	qualify	1
Unknown/TICs:	Fifteen non-target compounds detected. QAS agrees with the laboratory's calls.				
Semivolatiles (ug/Kg): (1:100 Dilution)					
fluorene	U	134J	134J	qualify	2
phenanthrene	U	334J	334J	qualify	2
chrysene	U	136J	136J	qualify	2
Unknown/TICs:	Twenty five non-target compounds detected. QAS agrees with the laboratory's calls.				
Pesticides/PCBs (ug/Kg):	Target compounds not detected.				
Metals (mg/Kg):					
arsenic	U	0.64	0.64		
copper	U	33	33		
lead	U	0.24	0.24		
nickel	U	3	3		
selenium	U	0.36	0.36		
Phenol (mg/Kg):	U	2.8	2.8		
Cyanide (mg/Kg):	Not Detected.				
230179					
Volatiles (ug/Kg): (1:50 Dilution)					
toluene	U	120J	120J	qualify	2

ATTACHMENT JJ-6

ethylbenzene	U	690	690		
total xylenes	U	1170	1170		

Unknown/TICs: Fifteen non-target compounds detected. QAS agrees with the laboratory's calls.

Semivolatiles (ug/Kg): **(1:100 Dilution)**

fluorene	U	181J	181J	qualify	2
phenanthrene	U	429J	429J	qualify	2
naphthalene	U	155J	155J	qualify	2
chrysene	U	148J	148J	qualify	2

Unknown/TICs: Twenty five non-target compounds detected. QAS agrees with the laboratory's calls.

Pesticides/PCBs (ug/Kg): Target compounds not detected.

Metals (mg/Kg):

arsenic	U	0.28	0.28
copper	U	15	15
lead	U	0.42	0.42
nickel	U	2.2	2.2
selenium	U	0.26	0.26

Phenol (mg/Kg): Not Detected.

Cyanide (mg/Kg): Not Detected.

230180

Volatiles (ug/Kg): **(1:50 Dilution)**

1,1-dichloroethane	U	1900	1900		
benzene	U	53J	53J	qualify	2
tetrachloroethene	U	220J	220J	qualify	2
toluene	U	94J	94J	qualify	2
chlorobenzene	U	110J	110J	qualify	2
total xylenes	U	570	570		

Unknown/TICs: Fifteen non-target compounds detected. QAS agrees with the laboratory's calls.

Semivolatiles (ug/Kg): **(1:100 Dilution)**

fluorene	U	102J	102J	qualify	2
phenanthrene	U	237J	237J	qualify	2
bis(2-ethylhexyl)phthalate	U	1710	1710		
chrysene	U	119J	119J	qualify	2

ATTACHMENT JJ-7

Sample Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Unknown/TICs:	Twenty five non-target compounds detected. QAS agrees with the laboratory's calls.				
Pesticides/PCBs (ug/Kg):	Target compounds not detected.				
Metals (mg/Kg):					
arsenic	U	0.62	0.62		
copper	U	3.7	3.7		
lead	U	0.33	0.33		
nickel	U	1.5	1.5		
selenium	U	0.22	0.22		
zinc	U	2	2		
Phenol (mg/Kg):	Not Detected.				
Cyanide (mg/Kg):	Not Detected.				
230181-FB					
Volatiles (ug/L):	Target and non-target compounds not detected.				
Semivolatiles (ug/L):	Target and non-target compounds not detected.				
Pesticides/PCBs (ug/L):	Target compounds not detected.				
Metals (ug/L):	Target analytes not detected.				
Phenol (mg/L):	Not Detected.				
Cyanide (mg/Kg):	Not Detected.				
230182-TB					
Volatiles (ug/L):	Target and non-target compounds not detected.				

Footnotes

1. The reported concentration is quantitatively qualified due to high surrogate (Toluene-d8) recovery and may be biased high.

2. The reported concentration is quantitatively qualified because the concentration is below the CRQL or MDL.

ATTACHMENT JJ-8

ATTACHMENT KK

SOUTHWEST RESEARCH INSTITUTE

6220 CULEBRA ROAD • POST OFFICE DRAWER 28510 • SAN ANTONIO, TEXAS, USA 78228-0510 • (210) 684-5111 • TELEX 244846

PAPERBOARD DIOXIN

Chemistry and Chemical Engineering Division
Department of Environmental Chemistry

March 27, 1996

Mr. Frank Sorce
NJDEP/DPSFR/ENSA
300 Horizon Center
CN-407
Trenton, NJ 08625-0407

Subject: Dioxin Analyses
SwRI Project Number: 01-7518-085
SwRI Work Order Number: 8597
Samples Received: March 4, 1996

Dear Mr. Sorce:

Enclosed are the analytical data for the above referenced project. If you should have any questions, please do not hesitate to call me at 210/522-2169.

Sincerely,

Jo Ann Boyd
Group Leader
Quality Assurance Unit,
Division 01

TECHNICAL APPROVAL:

Joseph C. Pan

Joseph C. Pan, Ph.D.
Manager

Encl

JAB/srg

ATTACHMENT KK-1

NJDEP/DPSFR/ENSA
01-7518-085
WO 8597

NARRATIVE

ATTACHMENT KK-2

NJDEP/DPSFR/ENSA

1. Tow (2) solid samples for Dioxin Analysis.

SwRI	Customer ID
67855	B-20
67856	B-1N

2. Samples were received at SwRI on March 4, 1996 for a thirty (30) day turnaround time from Validated Time of Sample Receipt (VTSR).

3. Samples were received at a temperature of 16 degrees C.

DIOXIN ANALYSIS (METHOD 1613)

1. Samples were analyzed for dioxin by Method 1613 (Tetra- Through Octa- Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS).

2. Samples were extracted within 1 day of receipt. There are no holding times specified by the method.

3. The blank was found to be clean of target compounds above the detection limit.

4. The Laboratory Control Sample (LCS) met QC recovery criteria of 60-140%.

5. The initial calibration met the criteria of $\leq$ 35 RSD.

6. The recoveries for several internal standards (two for the LCS and one for sample B-20) were below the 25-150% QC limits. Because Method 1613 is an internal standard dilution method, quantitation is not necessarily affected by these low recoveries. The recoveries of target analytes in the LCS indicate that the quantitation of target analytes are still valid and within criteria.

ATTACHMENT KK-3

NJDEP/DPSFR/ENSA
SwRI Project Number: 01-7518-085
SwRI Work Order Number: 8597
March 27, 1996
Page 2

"I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Director or his designee, as verified by the following signature."

Jo Ann Boyd — Date 3/27/96

Jo Ann Boyd
Group Leader
Quality Assurance Unit
Division 01

ATTACHMENT KK-4

CLIENT: NEW JERSEY DEPARTMENT OF
ENVIRONMENTAL PROTECTION
AND ENERGY
SDG: B-20

SAMPLE DATA
METHOD 1613

ATTACHMENT KK-5

Southwest Research Institute

010002

Dioxin/Dibenzofuran Analysis Report

Sample ID

B-20

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 10.0 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67855
Lab File Name: H03126H3_9
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 77%

CAS No.	ANALYTE	CONC	Q	EMPC	EDL	CRQL	RATIO	RT
1746-01-6	2,3,7,8-TCDD	ND		0.517		1.30		
40321-76-4	1,2,3,7,8-PeCDD	ND		2.28		6.49		
39227-28-6	1,2,3,4,7,8-HxCDD	2.27	J			6.49	1.17	43:38
57653-85-7	1,2,3,6,7,8-HxCDD	2.84	J			6.49	1.18	43:42
19408-74-3	1,2,3,7,8,9-HxCDD	3.39	J			6.49	1.31	43:58
35822-46-9	1,2,3,4,6,7,8-HpCDD	12.1				6.49	0.970	46:29
3268-87-9	OCDD	31.1				13.0	0.900	49:15
51207-31-9	2,3,7,8-TCDF	12.4				1.30	0.810	30:20
57117-41-6	1,2,3,7,8-PeCDF	3.24	J			6.49	1.49	37:19
57117-31-4	2,3,4,7,8-PeCDF	6.95				6.49	1.54	38:41
70648-26-9	1,2,3,4,7,8-HxCDF	9.94				6.49	1.25	42:50
57117-44-9	1,2,3,6,7,8-HxCDF	4.43	J			6.49	1.37	42:56
72918-21-9	1,2,3,7,8,9-HxCDF	2.52	J			6.49	1.22	44:08
60851-34-5	2,3,4,6,7,8-HxCDF	5.12	J			6.49	1.37	43:29
67562-39-4	1,2,3,4,6,7,8-HpCDF	24.8				6.49	1.09	45:36
55673-89-7	1,2,3,4,7,8,9-HpCDF	3.93	J			6.49	1.13	46:50
39001-02-0	OCDF	16.1				13.0	0.830	49:22

Total Dioxin	CONC	Number	Total Dibenzofuran	CONC	Number
Total Tetra-Dioxins	49.0		Total Tetra-Furans	49.8	
Total Penta-Dioxins	35.6		Total Penta-Furans	48.7	
Total Hexa-Dioxins	33.7		Total Hexa-Furans	36.1	
Total Hepta-Dioxins	31.1		Total Hepta-Furans	28.7	

Internal Standard % Recovery

13C-2,3,7,8-TCDD:	97.9	13C-1,2,3,7,8-PeCDD:	75.4	13C-1,2,3,4,7,8-HxCDD:	98.0
13C-1,2,3,6,7,8-HxCDD:	81.5	13C-1,2,3,4,6,7,8-HpCDD:	26.0	13C-OCDD:	48.8
13C-2,3,7,8-TCDF:	88.2	13C-1,2,3,7,8-PeCDF:	81.2	13C-2,3,4,7,8-PeCDF:	70.4
13C-1,2,3,4,7,8-HxCDF:	118	13C-1,2,3,6,7,8-HxCDF:	88.3	13C-1,2,3,7,8,9-HxCDF:	91.9
13C-2,3,4,6,7,8-HxCDF:	84.4	13C-1,2,3,4,6,7,8-HpCDF:	45.8	13C-1,2,3,4,7,8,9-HpCDF:	21.8

Clean-Up Standard % Recovery

37Cl-2,3,7,8-TCDD 140

ATTACHMENT KK-6

010003

Southwest Research Institute

PCDD/PCDF Toxicity Equivalence Summary

Sample ID

B-20

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 10.0 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67855
Lab File Name: H03126H3_9
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 77%

CAS No.	ANALYTE	CONCENTRATION	TEF	ADJUSTED CONC
1746-01-6	2,3,7,8-TCDD	ND	1.0	ND
40321-76-4	1,2,3,7,8-PeCDD	ND	0.5	ND
39227-28-6	1,2,3,4,7,8-HxCDD	2.27	0.1	0.227
57653-85-7	1,2,3,6,7,8-HxCDD	2.84	0.1	0.284
19408-74-3	1,2,3,7,8,9-HxCDD	3.39	0.1	0.339
35822-46-9	1,2,3,4,6,7,8-HpCDD	12.1	0.01	0.121
3268-87-9	OCDD	31.1	0.001	0.0311
51207-31-9	2,3,7,8-TCDF	12.4	0.1	1.24
57117-41-6	1,2,3,7,8-PeCDF	3.24	0.05	0.162
57117-31-4	2,3,4,7,8-PeCDF	6.95	0.5	3.48
70648-26-9	1,2,3,4,7,8-HxCDF	9.94	0.1	0.994
57117-44-9	1,2,3,6,7,8-HxCDF	4.43	0.1	0.443
72918-21-9	1,2,3,7,8,9-HxCDF	2.52	0.1	0.252
60851-34-5	2,3,4,6,7,8-HxCDF	5.12	0.1	0.512
67562-39-4	1,2,3,4,6,7,8-HpCDF	24.8	0.01	0.248
55673-89-7	1,2,3,4,7,8,9-HpCDF	3.93	0.01	0.0393
39001-02-0	OCDF	16.1	0.001	0.0161
			Total	8.39

ATTACHMENT KK-7

Run #2 Filename H03126H3 Samp: 9 Inj: 1 Acquired: 12-MAR-96 20:11:58

Processed: 13-Mar-96 09:56:29 Comments: NJDEP/DPSFR/ENSA B-20 SN:67855

	Typ	Name	Resp	RA	RT	Ical RRF	Amount (pg/uL)	Conc.	TOX	%REC.	DET.LIM
1	Unk	2,3,7,8-TCDF	3.277e+05	0.81 y	30:20	0.809	4.774	4.7743	0.48	-	0.01
2	Unk	1,2,3,7,8-PeCDF	7.257e+04	1.49 y	37:19	1.081	1.249	1.2493	0.62	-	0.09
3	Unk	2,3,4,7,8-PeCDF	1.392e+05	1.54 y	38:41	1.108	2.678	2.6778	1.34	-	0.09
4	Unk	1,2,3,4,7,8-HxCDF	1.875e+05	1.25 y	42:50	1.257	3.827	3.8267	0.38	-	0.10
5	Unk	1,2,3,6,7,8-HxCDF	1.041e+05	1.37 y	42:56	1.190	1.705	1.7053	0.17	-	0.10
6	Unk	2,3,4,6,7,8-HxCDF	9.693e+04	1.37 y	43:29	1.239	1.971	1.9707	0.20	-	0.11
7	Unk	1,2,3,7,8,9-HxCDF	4.000e+04	1.22 y	44:08	1.289	0.969	0.9694	0.10	-	0.15
8	Unk	1,2,3,4,6,7,8-HpCDF	2.300e+05	1.09 y	45:36	1.635	9.541	9.5410	0.10	-	0.07
9	Unk	1,2,3,4,7,8,9-HpCDF	1.450e+04	1.13 y	46:50	1.760	1.512	1.5115	0.02	-	0.21
10	Unk	OCDF	1.206e+05	0.83 y	49:22	1.574	6.209	6.2086	0.01	-	0.11
11	Unk	2,3,7,8-TCDD	8.900e+03	0.63 n	31:34	0.953	0.199	0.1993	0.20	-	0.00
12	Unk	1,2,3,7,8-PeCDD	2.360e+04	1.23 n	39:23	1.206	0.879	0.8786	0.44	-	0.06
13	Unk	1,2,3,4,7,8-HxCDD	2.088e+04	1.17 y	43:38	1.141	0.873	0.8734	0.09	-	0.00
14	Unk	1,2,3,6,7,8-HxCDD	4.008e+04	1.18 y	43:42	0.911	1.093	1.0935	0.11	-	0.00
15	Unk	1,2,3,7,8,9-HxCDD	4.217e+04	1.31 y	43:58	1.054	1.307	1.3074	0.13	-	0.00
16	Unk	1,2,3,4,6,7,8-HpCDD	4.062e+04	0.97 y	46:29	1.087	4.655	4.6551	0.05	-	0.15
17	Unk	OCDD	1.822e+05	0.90 y	49:15	1.233	11.972	11.9716	0.01	-	0.11
18	IS/R	13C-2,3,7,8-TCDF	8.482e+06	0.77 y	30:17	1.871	88.169	88.1695	-	88.2	0.01
19	IS	13C-1,2,3,7,8-PeCDF	5.372e+06	1.72 y	37:18	1.287	81.158	81.1580	-	81.2	0.00
20	IS	13C-2,3,4,7,8-PeCDF	4.691e+06	1.70 y	38:40	1.295	70.445	70.4449	-	70.4	0.00
21	IS	13C-1,2,3,4,7,8-HxCDF	3.897e+06	0.47 y	42:49	0.950	118.260	118.2598	-	118.3	0.00
22	IS	13C-1,2,3,6,7,8-HxCDF	5.131e+06	0.48 y	42:56	1.675	88.301	88.3007	-	88.3	0.00
23	IS	13C-2,3,4,6,7,8-HxCDF	3.971e+06	0.48 y	43:28	1.356	84.381	84.3806	-	84.4	0.00
24	IS	13C-1,2,3,7,8,9-HxCDF	3.200e+06	0.48 y	44:07	1.004	91.883	91.8826	-	91.9	0.00
25	IS	13C-1,2,3,4,6,7,8-HpCDF	1.474e+06	0.42 y	45:35	0.928	45.783	45.7828	-	45.8	0.67
26	IS	13C-1,2,3,4,7,8,9-HpCDF	5.450e+05	0.44 y	46:50	0.719	21.836	21.8356	-	21.8	0.86
27	IS	13C-2,3,7,8-TCDD	4.687e+06	0.76 y	31:35	0.931	97.876	97.8759	-	97.9	0.10
28	IS	13C-1,2,3,7,8-PeCDD	2.228e+06	1.69 y	39:22	0.575	75.395	75.3953	-	75.4	0.00
29	IS	13C-1,2,3,4,7,8-HxCDD	2.095e+06	1.39 y	43:37	0.616	98.032	98.0319	-	98.0	0.00
30	IS	13C-1,2,3,6,7,8-HxCDD	4.024e+06	1.30 y	43:41	1.423	81.520	81.5204	-	81.5	0.00
31	IS	13C-1,2,3,4,6,7,8-HpCDD	8.030e+05	1.00 y	46:29	0.889	26.023	26.0235	-	26.0	0.02
32	IS	13C-OCDD	2.469e+06	0.86 y	49:14	0.729	97.589	97.5890	-	48.8	0.13
33	RS	13C-1,2,3,4-TCDD	5.143e+06	0.78 y	31:14	-	58.578	58.5784	-	-	-
34	RS/R	13C-1,2,3,7,8,9-HxCDD	3.470e+06	1.34 y	43:57	-	49.188	49.1883	-	-	-
35	C/Up	37Cl-2,3,7,8-TCDD	8.672e+05	- -	31:37	1.204	14.002	14.0022	-	140.0	0.00
36	Tot	Total Tetra-Furans	1.399e+06	0.74 y	25:10	0.809	20.379	20.3786	-	-	0.01
37	Tot	Total Tetra-Dioxins	8.719e+05	0.78 y	27:25	0.953	19.521	19.5215	-	-	0.00
38	Tot	Total Penta-Furans	1.029e+06	1.50 y	33:49	1.094	18.772	18.7725	-	-	0.09
39	Tot	Total Penta-Dioxins	3.914e+05	1.59 y	36:06	1.206	14.575	14.5751	-	-	0.06
40	Tot	Total Hexa-Furans	7.083e+05	1.34 y	41:42	1.236	14.061	14.0615	-	-	0.12
41	Tot	Total Hexa-Dioxins	4.018e+05	1.18 y	42:21	1.005	12.987	12.9875	-	-	0.00
42	Tot	Total Hepta-Furans	2.445e+05	1.04 y	45:36	1.689	11.053	11.0526	-	-	0.11
43	Tot	Total Hepta-Dioxins	1.046e+05	1.04 y	45:52	1.087	11.988	11.9875	-	-	0.15

NJDEP SDG B-20

ATTACHMENT KK-8

Run #2 Filename H03126H3 Samp: 9 Inj: 1 Acquired: 12-MAR-96 20:11:58

Processed: 13-Mar-96 09:56:29 Comments: NJDEP/DPSFR/ENSA B-20 SN:67855

	Typ	Name	M/Z#1	M/Z#2	m1 RESP.	m2 RESP.	m1Height	m2Height	m1 Noise	m2 Noise	m1 S/N	m2 S/N	Det Lim	Eqn
1	Unk	2,3,7,8-TCDF	303.90	305.90	1.47e+05	1.81e+05	1.73e+04	2.10e+04	0.00e+00	3.60e+01	Div0	5.83e+02	0.01	Mean
2	Unk	1,2,3,7,8-PeCDF	339.86	341.86	4.34e+04	2.92e+04	6.60e+03	4.26e+03	1.20e+02	7.60e+01	5.50e+01	5.60e+01	0.09	Mean
3	Unk	2,3,4,7,8-PeCDF	339.86	341.86	8.43e+04	5.49e+04	1.34e+04	8.32e+03	1.20e+02	7.60e+01	1.12e+02	1.09e+02	0.09	Mean
4	Unk	1,2,3,4,7,8-HxCDF	373.82	375.82	1.04e+05	8.34e+04	2.33e+04	1.98e+04	2.12e+02	2.08e+02	1.10e+02	9.50e+01	0.10	Mean
5	Unk	1,2,3,6,7,8-HxCDF	373.82	375.82	6.01e+04	4.40e+04	1.56e+04	1.13e+04	2.12e+02	2.08e+02	7.37e+01	5.43e+01	0.10	Mean
6	Unk	2,3,4,6,7,8-HxCDF	373.82	375.82	5.61e+04	4.08e+04	1.34e+04	1.22e+04	2.12e+02	2.08e+02	6.32e+01	5.86e+01	0.11	Mean
7	Unk	1,2,3,7,8,9-HxCDF	373.82	375.82	2.20e+04	1.80e+04	3.90e+03	3.40e+03	2.12e+02	2.08e+02	1.84e+01	1.63e+01	0.15	Mean
8	Unk	1,2,3,4,6,7,8-HpCDF	407.78	409.78	1.20e+05	1.10e+05	1.72e+04	1.74e+04	2.00e+01	5.20e+01	8.58e+02	3.34e+02	0.07	Mean
9	Unk	1,2,3,4,7,8,9-HpCDF	407.78	409.78	7.70e+03	6.80e+03	1.15e+03	9.87e+02	2.00e+01	5.20e+01	5.73e+01	1.90e+01	0.21	Mean
10	Unk	OCDF	441.74	443.74	5.48e+04	6.58e+04	6.24e+03	7.54e+03	2.80e+01	3.60e+01	2.23e+02	2.09e+02	0.11	Mean
11	Unk	2,3,7,8-TCDD	319.90	321.89	3.43e+03	5.47e+03	4.75e+02	7.49e+02	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
12	Unk	1,2,3,7,8-PeCDD	355.86	357.85	1.30e+04	1.06e+04	1.92e+03	1.43e+03	4.40e+01	1.60e+01	4.36e+01	8.94e+01	0.06	Mean
13	Unk	1,2,3,4,7,8-HxCDD	389.82	391.81	1.12e+04	9.63e+03	5.01e+03	3.74e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
14	Unk	1,2,3,6,7,8-HxCDD	389.82	391.81	2.17e+04	1.84e+04	4.80e+03	5.04e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
15	Unk	1,2,3,7,8,9-HxCDD	389.82	391.81	2.39e+04	1.82e+04	4.98e+03	3.99e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
16	Unk	1,2,3,4,6,7,8-HpCDD	423.78	425.77	2.00e+04	2.06e+04	2.89e+03	2.93e+03	4.80e+01	0.00e+00	6.01e+01	Div0	0.15	Mean
17	Unk	OCDD	457.74	459.74	8.64e+04	9.58e+04	9.52e+03	1.08e+04	4.00e+01	8.00e+00	2.38e+02	1.35e+03	0.11	Mean
18	IS/R	13C-2,3,7,8-TCDF	315.94	317.94	3.69e+06	4.80e+06	5.68e+05	7.40e+05	5.20e+01	0.00e+00	1.09e+04	Div0	0.01	Mean
19	IS	13C-1,2,3,7,8-PeCDF	351.90	353.90	3.40e+06	1.97e+06	5.36e+05	3.14e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
20	IS	13C-2,3,4,7,8-PeCDF	351.90	353.90	2.95e+06	1.74e+06	4.91e+05	2.83e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
21	IS	13C-1,2,3,4,7,8-HxCDF	383.86	385.86	1.24e+06	2.65e+06	4.23e+05	8.56e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
22	IS	13C-1,2,3,6,7,8-HxCDF	383.86	385.86	1.65e+06	3.48e+06	4.37e+05	9.32e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
23	IS	13C-2,3,4,6,7,8-HxCDF	383.86	385.86	1.29e+06	2.68e+06	4.08e+05	8.15e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
24	IS	13C-1,2,3,7,8,9-HxCDF	383.86	385.86	1.04e+06	2.16e+06	2.77e+05	5.92e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
25	IS	13C-1,2,3,4,6,7,8-HpCDF	417.82	419.82	4.34e+05	1.04e+06	7.33e+04	1.84e+05	4.72e+02	1.05e+03	1.55e+02	1.76e+02	0.67	Mean
26	IS	13C-1,2,3,4,7,8,9-HpCDF	417.82	419.82	1.66e+05	3.79e+05	2.32e+04	5.38e+04	4.72e+02	1.05e+03	4.92e+01	5.13e+01	0.86	Mean
27	IS	13C-2,3,7,8-TCDD	331.94	333.93	2.03e+06	2.66e+06	2.39e+05	3.11e+05	1.88e+02	0.00e+00	1.27e+03	Div0	0.10	Mean
28	IS	13C-1,2,3,7,8-PeCDD	367.89	369.89	1.40e+06	8.29e+05	2.26e+05	1.31e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
29	IS	13C-1,2,3,4,7,8-HxCDD	401.86	403.85	1.22e+06	8.75e+05	4.39e+05	3.27e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
30	IS	13C-1,2,3,6,7,8-HxCDD	401.86	403.85	2.28e+06	1.75e+06	6.54e+05	5.04e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
31	IS	13C-1,2,3,4,6,7,8-HpCDD	435.82	437.81	4.02e+05	4.01e+05	5.78e+04	5.84e+04	8.00e+00	4.00e+01	7.23e+03	1.46e+03	0.02	Mean
32	IS	13C-OCDD	469.78	471.77	1.14e+06	1.33e+06	1.36e+05	1.58e+05	2.28e+02	0.00e+00	5.98e+02	Div0	0.13	Mean
33	RS	13C-1,2,3,4-TCDD	331.94	333.93	2.25e+06	2.89e+06	3.73e+05	4.70e+05	1.88e+02	0.00e+00	1.99e+03	Div0	-	Mean
34	RS/R	13C-1,2,3,7,8,9-HxCDD	401.86	403.85	1.99e+06	1.48e+06	5.46e+05	4.29e+05	0.00e+00	0.00e+00	Div0	Div0	-	Mean
35	C/Up	37Cl-2,3,7,8-TCDD	327.88		8.67e+05		9.76e+04		0.00e+00		Div0		0.00	Mean

NJDEP SDG B-20 ATTACHMENT KK-9

010005

PEAK-LIST: Total Tetra-Furans Entry #: 36

Run: 2 File: H03126H3 S: 9 I: 1 F: 1
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 1.399e+06

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	25:10	8.218e+03	1.106e+04	0.74 y	1.928e+04	Div0	46.3	
2	25:57	1.405e+04	1.383e+04	1.02 n	2.788e+04	Div0	57.9	
3	26:22	2.365e+04	2.965e+04	0.80 y	5.330e+04	Div0	116.4	
4	26:54	4.934e+04	6.744e+04	0.73 y	1.168e+05	Div0	193.7	
5	27:03	2.690e+04	2.720e+04	0.99 n	5.410e+04	-	-	
6	27:29	5.090e+04	6.153e+04	0.83 y	1.124e+05	Div0	171.6	
7	28:06	7.366e+04	9.325e+04	0.79 y	1.669e+05	Div0	239.9	
8	28:30	9.884e+03	1.354e+04	0.73 y	2.342e+04	Div0	58.7	
9	28:39	3.856e+04	4.586e+04	0.84 y	8.441e+04	Div0	196.5	
10	28:59	5.085e+04	6.608e+04	0.77 y	1.169e+05	Div0	239.3	
11	29:12	2.711e+04	3.545e+04	0.76 y	6.256e+04	Div0	134.2	
12	29:33	3.542e+04	4.870e+04	0.73 y	8.412e+04	Div0	195.9	
13	29:57	2.021e+04	2.687e+04	0.75 y	4.709e+04	Div0	104.1	
14	30:20	1.467e+05	1.811e+05	0.81 y	3.277e+05	Div0	582.8	2,3,7,8-TCDF
15	31:03	3.027e+04	3.974e+04	0.76 y	7.002e+04	Div0	182.0	
16	31:24	1.372e+04	1.816e+04	0.76 y	3.188e+04	Div0	66.8	

PEAK-LIST: Total Tetra-Dioxins Entry #: 37

Run: 2 File: H03126H3 S: 9 I: 1 F: 1
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 8.808e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	27:25	1.863e+05	2.385e+05	0.78 y	4.248e+05	Div0	Div0	
2	28:00	9.280e+04	1.280e+05	0.72 y	2.208e+05	-	-	
3	28:33	1.404e+04	1.751e+04	0.80 y	3.155e+04	Div0	Div0	
4	29:37	2.993e+04	3.989e+04	0.75 y	6.982e+04	Div0	Div0	
5	30:06	1.096e+04	1.757e+04	0.62 n	2.854e+04	Div0	Div0	
6	30:42	9.863e+03	1.447e+04	0.68 y	2.433e+04	Div0	Div0	
7	31:14	1.259e+04	1.491e+04	0.84 y	2.749e+04	Div0	Div0	
8	31:26	1.810e+04	2.650e+04	0.68 y	4.460e+04	Div0	Div0	
9	31:34	3.430e+03	5.470e+03	0.63 n	8.900e+03	-	-	

PEAK-LIST: Total Penta-Furans Entry #: 38

Run: 2 File: H03126H3 S: 9 I: 1 F: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 1.029e+06

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	33:49	4.794e+04	3.201e+04	1.50 y	7.994e+04	63.1	65.6	
2	35:32	1.334e+04	9.182e+03	1.45 y	2.252e+04	18.0	18.3	
3	35:48	2.148e+05	1.314e+05	1.63 y	3.462e+05	224.9	209.8	
4	36:05	3.427e+04	2.135e+04	1.60 y	5.562e+04	45.2	37.8	
5	36:45	7.663e+04	4.793e+04	1.60 y	1.246e+05	77.6	82.0	
6	37:11	1.772e+04	1.314e+04	1.35 y	3.086e+04	26.9	28.2	

7	37:19	4.340e+04	2.917e+04	1.49 y	7.257e+04	55.0	56.0	1,2,3,7,8-PeCDF
8	37:37	1.274e+04	7.514e+03	1.70 y	2.026e+04	17.9	13.4	
9	37:52	3.311e+04	1.978e+04	1.67 y	5.289e+04	43.3	39.1	
10	38:41	8.427e+04	5.488e+04	1.54 y	1.392e+05	111.6	109.5	2,3,4,7,8-PeCDF
11	38:56	4.980e+04	3.489e+04	1.43 y	8.469e+04	59.6	59.2	

PEAK-LIST: Total Penta-Dioxins Entry #: 39

Run: 2 File: H03126H3 S: 9 I: 1 F: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 3.915e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	36:06	8.912e+04	5.592e+04	1.59 y	1.450e+05	290.1	463.9	
2	36:56	4.098e+03	3.069e+03	1.34 y	7.168e+03	15.7	28.7	
3	37:26	5.532e+04	3.725e+04	1.49 y	9.257e+04	191.8	365.8	
4	37:42	6.428e+03	4.014e+03	1.60 y	1.044e+04	20.6	35.1	
5	38:00	3.080e+04	2.230e+04	1.38 y	5.310e+04	105.0	190.0	
6	38:18	4.843e+03	3.084e+03	1.57 y	7.926e+03	16.3	29.8	
7	38:28	8.503e+03	5.674e+03	1.50 y	1.418e+04	24.5	49.7	
8	38:50	1.217e+04	6.915e+03	1.76 y	1.909e+04	45.4	58.9	
9	39:01	5.805e+03	3.486e+03	1.67 y	9.291e+03	14.6	29.3	
10	39:23	1.300e+04	1.060e+04	1.23 n	2.360e+04	43.4	89.1	~~1,2,3,7,8-PeCDD~~ RCG 3/14/96
11	40:13	5.337e+03	3.773e+03	1.41 y	9.110e+03	15.8	30.8	

PEAK-LIST: Total Hexa-Furans Entry #: 40

Run: 2 File: H03126H3 S: 9 I: 1 F: 3
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 7.083e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	41:42	3.237e+04	2.410e+04	1.34 y	5.647e+04	44.3	32.8	
2	41:52	1.028e+05	8.478e+04	1.21 y	1.876e+05	134.9	99.0	
3	42:12	6.815e+03	5.578e+03	1.22 y	1.239e+04	10.0	7.6	
4	42:25	4.410e+03	2.906e+03	1.52 n	7.316e+03	9.7	4.3	
5	42:50	1.041e+05	8.343e+04	1.25 y	1.875e+05	109.7	95.0	1,2,3,4,7,8-HxCDF
6	42:56	6.011e+04	4.402e+04	1.37 y	1.041e+05	73.7	54.3	1,2,3,6,7,8-HxCDF
7	43:15	9.064e+03	6.924e+03	1.31 y	1.599e+04	6.4	6.7	
8	43:29	5.610e+04	4.083e+04	1.37 y	9.693e+04	63.2	58.6	2,3,4,6,7,8-HxCDF
9	44:08	2.200e+04	1.800e+04	1.22 y	4.000e+04	18.4	16.3	1,2,3,7,8,9-HxCDF

PEAK-LIST: Total Hexa-Dioxins Entry #: 41

Run: 2 File: H03126H3 S: 9 I: 1 F: 3
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 4.018e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	42:21	1.560e+04	1.322e+04	1.18 y	2.882e+04	Div0	Div0	
2	42:52	1.035e+05	8.102e+04	1.28 y	1.845e+05	Div0	Div0	
3	43:05	4.163e+04	2.966e+04	1.40 y	7.130e+04	Div0	Div0	
4	43:14	7.318e+03	6.765e+03	1.08 y	1.408e+04	Div0	Div0	

5	43:38	1.125e+04	9.629e+03	1.17 y	2.088e+04	Div0	Div0	1,2,3,4,7,8-HxCDD
6	43:42	2.167e+04	1.840e+04	1.18 y	4.008e+04	Div0	Div0	1,2,3,6,7,8-HxCDD
7	43:58	2.393e+04	1.824e+04	1.31 y	4.217e+04	Div0	Div0	1,2,3,7,8,9-HxCDD

PEAK-LIST: Total Hepta-Furans Entry #: 42

Run: 2 File: H03126H3 S: 9 I: 1 F: 4
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 2.445e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	45:36	1.200e+05	1.100e+05	1.09 y	2.300e+05	860.0	334.6	1,2,3,4,6,7,8-HpCDF
2	46:50	7.700e+03	6.800e+03	1.13 y	1.450e+04	57.3	19.0	1,2,3,4,7,8,9-HpCDF

PEAK-LIST: Total Hepta-Dioxins Entry #: 43

Run: 2 File: H03126H3 S: 9 I: 1 F: 4
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

SAMPLE NO.: NJDEP/DPSFR/ENSA B-20 SN:67855 Resp: 1.046e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	45:52	3.260e+04	3.139e+04	1.04 y	6.399e+04	101.5	Div0	
2	46:29	2.002e+04	2.060e+04	0.97 y	4.062e+04	60.1	Div0	1,2,3,4,6,7,8-HpCDD

Totals Class: Total Tetra-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:1
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 14.41 of which * named and 14.410 unnamed
Conc: 14.410 of which * named and 14.410 unnamed

303.902 305.899

#	RT	m1 Resp	m2 Resp	RA		Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	25:10	8.218e+03	1.106e+04	0.74	y	1.928e+04	1.928e+04	Div0	46.3	0.281	0.281	
2	26:22	2.365e+04	2.965e+04	0.80	y	5.330e+04	5.330e+04	Div0	116.4	0.776	0.776	
3	26:54	4.934e+04	6.744e+04	0.73	y	1.168e+05	1.168e+05	Div0	193.7	1.701	1.701	
4	27:29	5.090e+04	6.153e+04	0.83	y	1.124e+05	1.124e+05	Div0	171.6	1.638	1.638	
5	28:06	7.366e+04	9.325e+04	0.79	y	1.669e+05	1.669e+05	Div0	239.9	2.431	2.431	
6	28:30	9.884e+03	1.354e+04	0.73	y	2.342e+04	2.342e+04	Div0	58.7	0.341	0.341	
7	28:39	3.856e+04	4.586e+04	0.84	y	8.441e+04	8.441e+04	Div0	196.5	1.230	1.230	
8	28:59	5.085e+04	6.608e+04	0.77	y	1.169e+05	1.169e+05	Div0	239.3	1.703	1.703	
9	29:12	2.711e+04	3.545e+04	0.76	y	6.256e+04	6.256e+04	Div0	134.2	0.911	0.911	
10	29:33	3.542e+04	4.870e+04	0.73	y	8.412e+04	8.412e+04	Div0	195.9	1.225	1.225	
11	29:57	2.021e+04	2.687e+04	0.75	y	4.709e+04	4.709e+04	Div0	104.1	0.686	0.686	
12	31:03	3.027e+04	3.974e+04	0.76	y	7.002e+04	7.002e+04	Div0	182.0	1.020	1.020	
13	31:24	1.372e+04	1.816e+04	0.76	y	3.188e+04	3.188e+04	Div0	66.8	0.464	0.464	

Totals Class: Total Tetra-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:1
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 18.88 of which * named and 18.883 unnamed
Conc: 18.883 of which * named and 18.883 unnamed

319.897 321.894

#	RT	m1 Resp	m2 Resp	RA		Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	27:25	1.863e+05	2.385e+05	0.78	y	4.248e+05	4.248e+05	Div0	Div0	9.511	9.511	
2	28:00	9.280e+04	1.280e+05	0.72	y	2.208e+05	2.208e+05	-	-	4.943	4.943	
3	28:33	1.404e+04	1.751e+04	0.80	y	3.155e+04	3.155e+04	Div0	Div0	0.706	0.706	
4	29:37	2.993e+04	3.989e+04	0.75	y	6.982e+04	6.982e+04	Div0	Div0	1.563	1.563	
5	30:42	9.863e+03	1.447e+04	0.68	y	2.433e+04	2.433e+04	Div0	Div0	0.545	0.545	
6	31:14	1.259e+04	1.491e+04	0.84	y	2.749e+04	2.749e+04	Div0	Div0	0.616	0.616	
7	31:26	1.810e+04	2.650e+04	0.68	y	4.460e+04	4.460e+04	Div0	Div0	0.999	0.999	

Totals Class: Total Penta-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:2
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 14.85 of which * named and 14.845 unnamed
Conc: 14.845 of which * named and 14.845 unnamed

339.860 341.857

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	33:49	4.794e+04	3.201e+04	1.50 y	7.994e+04	7.994e+04	63.1	65.6	1.452	1.452	
2	35:32	1.334e+04	9.182e+03	1.45 y	2.252e+04	2.252e+04	18.0	18.3	0.409	0.409	
3	35:48	2.148e+05	1.314e+05	1.63 y	3.462e+05	3.462e+05	224.9	209.8	6.286	6.286	
4	36:05	3.427e+04	2.135e+04	1.60 y	5.562e+04	5.562e+04	45.2	37.8	1.010	1.010	
5	36:45	7.663e+04	4.793e+04	1.60 y	1.246e+05	1.246e+05	77.6	82.0	2.262	2.262	
6	37:11	1.772e+04	1.314e+04	1.35 y	3.086e+04	3.086e+04	26.9	28.2	0.560	0.560	
7	37:37	1.274e+04	7.514e+03	1.70 y	2.026e+04	2.026e+04	17.9	13.4	0.368	0.368	
8	37:52	3.311e+04	1.978e+04	1.67 y	5.289e+04	5.289e+04	43.3	39.1	0.961	0.961	
9	38:56	4.980e+04	3.489e+04	1.43 y	8.469e+04	8.469e+04	59.6	59.2	1.538	1.538	

Totals Class: Total Penta-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:2
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 13.70 of which * named and 13.697 unnamed
Conc: 13.697 of which * named and 13.697 unnamed

355.855 357.852

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	36:06	8.912e+04	5.592e+04	1.59 y	1.450e+05	1.450e+05	290.1	463.9	5.399	5.399	
2	36:56	4.098e+03	3.069e+03	1.34 y	7.168e+03	7.168e+03	15.7	28.7	0.267	0.267	
3	37:26	5.532e+04	3.725e+04	1.49 y	9.257e+04	9.257e+04	191.8	365.8	3.446	3.446	
4	37:42	6.428e+03	4.014e+03	1.60 y	1.044e+04	1.044e+04	20.6	35.1	0.389	0.389	
5	38:00	3.080e+04	2.230e+04	1.38 y	5.310e+04	5.310e+04	105.0	190.0	1.977	1.977	
6	38:18	4.843e+03	3.084e+03	1.57 y	7.926e+03	7.926e+03	16.3	29.8	0.295	0.295	
7	38:28	8.503e+03	5.674e+03	1.50 y	1.418e+04	1.418e+04	24.5	49.7	0.528	0.528	
8	38:50	1.217e+04	6.915e+03	1.76 y	1.909e+04	1.909e+04	45.4	58.9	0.711	0.711	
9	39:01	5.805e+03	3.486e+03	1.67 y	9.291e+03	9.291e+03	14.6	29.3	0.346	0.346	
10	40:13	5.337e+03	3.773e+03	1.41 y	9.110e+03	9.110e+03	15.8	30.8	0.339	0.339	

NJDEP SDG B-20

ATTACHMENT KK-14

Totals Class: Total Hexa-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:3
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 5.44 of which * named and 5.443 unnamed
Conc: 5.443 of which * named and 5.443 unnamed

373.821 375.818

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	41:42	3.237e+04	2.410e+04	1.34 y	5.647e+04	5.647e+04	44.3	32.8	1.128	1.128	
2	41:52	1.028e+05	8.478e+04	1.21 y	1.876e+05	1.876e+05	134.9	99.0	3.748	3.748	
3	42:12	6.815e+03	5.578e+03	1.22 y	1.239e+04	1.239e+04	10.0	7.6	0.248	0.248	
4	43:15	9.064e+03	6.924e+03	1.31 y	1.599e+04	1.599e+04	6.4	6.7	0.319	0.319	

Totals Class: Total Hexa-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:3
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 9.71 of which * named and 9.713 unnamed
Conc: 9.713 of which * named and 9.713 unnamed

389.816 391.813

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	42:21	1.560e+04	1.322e+04	1.18 y	2.882e+04	2.882e+04	Div0	Div0	0.937	0.937	
2	42:52	1.035e+05	8.102e+04	1.28 y	1.845e+05	1.845e+05	Div0	Div0	6.000	6.000	
3	43:05	4.163e+04	2.966e+04	1.40 y	7.130e+04	7.130e+04	Div0	Div0	2.318	2.318	
4	43:14	7.318e+03	6.765e+03	1.08 y	1.408e+04	1.408e+04	Div0	Div0	0.458	0.458	

Totals Class: Total Hepta-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:4
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: * of which * named and * unnamed
Conc: * of which * named and * unnamed

407.782 409.779

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	NotF»	*	*	* n	*	*	Div0	Div0	*	*	

Totals Class: Total Hepta-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-20 SN:67855
File Name: H03126H3_S:9 I:1 F:4
Run: 2
Acquired: 12-MAR-96 20:11:58 Processed: 13-Mar-96 09:56:29

Amount: 7.33 of which * named and 7.332 unnamed
Conc: 7.332 of which * named and 7.332 unnamed

#	RT	m1 Resp (423.777)	m2 Resp (425.774)	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	45:52	3.260e+04	3.139e+04	1.04 y	6.399e+04	6.399e+04	101.5	Div0	7.332	7.332	

Southwest Research Institute 010029

Dioxin/Dibenzofuran Analysis Report

Sample ID

B-1N

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 5.00 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67856
Lab File Name: H03126H3_10
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 100%

CAS No.	ANALYTE	CONC	Q	EMPC	EDL	CRQL	RATIO	RT
1746-01-6	2,3,7,8-TCDD	0.836	J			2.00	0.710	31:33
40321-76-4	1,2,3,7,8-PeCDD	2.75	J			10.0	1.62	39:22
39227-28-6	1,2,3,4,7,8-HxCDD	1.82	J			10.0	1.18	43:37
57653-85-7	1,2,3,6,7,8-HxCDD	2.48	J			10.0	1.20	43:42
19408-74-3	1,2,3,7,8,9-HxCDD	2.87	J			10.0	1.39	43:57
35822-46-9	1,2,3,4,6,7,8-HpCDD	8.39	J			10.0	1.00	46:29
3268-87-9	OCDD	16.8	J			20.0	0.850	49:13
51207-31-9	2,3,7,8-TCDF	52.8				2.00	0.790	30:16
57117-41-6	1,2,3,7,8-PeCDF	17.2				10.0	1.59	37:17
57117-31-4	2,3,4,7,8-PeCDF	31.7				10.0	1.59	38:40
70648-26-9	1,2,3,4,7,8-HxCDF	37.6				10.0	1.23	42:49
57117-44-9	1,2,3,6,7,8-HxCDF	13.6				10.0	1.28	42:56
72918-21-9	1,2,3,7,8,9-HxCDF	3.16	J			10.0	1.19	44:07
60851-34-5	2,3,4,6,7,8-HxCDF	8.19	J			10.0	1.15	43:28
67562-39-4	1,2,3,4,6,7,8-HpCDF	37.7				10.0	1.07	45:35
55673-89-7	1,2,3,4,7,8,9-HpCDF	5.40	J			10.0	1.03	46:50
39001-02-0	OCDF	9.66	J			20.0	0.860	49:20

Total Dioxin	CONC	Number	Total Dibenzofuran	CONC	Number
Total Tetra-Dioxins	13.1		Total Tetra-Furans	183	
Total Penta-Dioxins	19.1		Total Penta-Furans	172	
Total Hexa-Dioxins	18.5		Total Hexa-Furans	100	
Total Hepta-Dioxins	14.6		Total Hepta-Furans	43.1	

Internal Standard % Recovery

13C-2,3,7,8-TCDD:	85.1	13C-1,2,3,7,8-PeCDD:	88.3	13C-1,2,3,4,7,8-HxCDD:	105
13C-1,2,3,6,7,8-HxCDD:	80.0	13C-1,2,3,4,6,7,8-HpCDD:	40.9	13C-OCDD:	30.9
13C-2,3,7,8-TCDF:	80.1	13C-1,2,3,7,8-PeCDF:	85.0	13C-2,3,4,7,8-PeCDF:	80.9
13C-1,2,3,4,7,8-HxCDF:	118	13C-1,2,3,6,7,8-HxCDF:	84.0	13C-1,2,3,7,8,9-HxCDF:	93.3
13C-2,3,4,6,7,8-HxCDF:	81.7	13C-1,2,3,4,6,7,8-HpCDF:	81.3	13C-1,2,3,4,7,8,9-HpCDF:	31.7

Clean-Up Standard % Recovery

37Cl-2,3,7,8-TCDD 118

ATTACHMENT KK-17

Southwest Research Institute 010030

PCDD/PCDF Toxicity Equivalence Summary

Sample ID

B-1N

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 5.00 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67856
Lab File Name: H03126H3_10
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 100%

CAS No.	ANALYTE	CONCENTRATION	TEF	ADJUSTED CONC
1746-01-6	2,3,7,8-TCDD	0.836	1.0	0.836
40321-76-4	1,2,3,7,8-PeCDD	2.75	0.5	1.38
39227-28-6	1,2,3,4,7,8-HxCDD	1.82	0.1	0.182
57653-85-7	1,2,3,6,7,8-HxCDD	2.48	0.1	0.248
19408-74-3	1,2,3,7,8,9-HxCDD	2.87	0.1	0.287
35822-46-9	1,2,3,4,6,7,8-HpCDD	8.39	0.01	0.0839
3268-87-9	OCDD	16.8	0.001	0.0168
51207-31-9	2,3,7,8-TCDF	52.8	0.1	5.28
57117-41-6	1,2,3,7,8-PeCDF	17.2	0.05	0.860
57117-31-4	2,3,4,7,8-PeCDF	31.7	0.5	15.8
70648-26-9	1,2,3,4,7,8-HxCDF	37.6	0.1	3.76
57117-44-9	1,2,3,6,7,8-HxCDF	13.6	0.1	1.36
72918-21-9	1,2,3,7,8,9-HxCDF	3.16	0.1	0.316
60851-34-5	2,3,4,6,7,8-HxCDF	8.19	0.1	0.819
67562-39-4	1,2,3,4,6,7,8-HpCDF	37.7	0.01	0.377
55673-89-7	1,2,3,4,7,8,9-HpCDF	5.40	0.01	0.0540
39001-02-0	OCDF	9.66	0.001	0.00966
			Total	31.7

ATTACHMENT KK-18

Run #3 Filename H03126H3 Samp: 10 Inj: 1 Acquired: 12-MAR-96 21: 7:27

Processed: 13-Mar-96 09:56:31 Comments: NJDEP/DPSFR/ENSA B-1N SN:67856

	Typ	Name	Resp	RA	RT	Ical RRF	Amount (pg/uL)	Conc.	TOX	%REC.	DET.LIM
1	Unk	2,3,7,8-TCDF	9.391e+05	0.79 y	30:16	0.809	13.191	13.1914	1.32	-	0.01
2	Unk	1,2,3,7,8-PeCDF	2.992e+05	1.59 y	37:17	1.081	4.309	4.3092	2.15	-	0.01
3	Unk	2,3,4,7,8-PeCDF	5.399e+05	1.59 y	38:40	1.108	7.930	7.9305	3.97	-	0.01
4	Unk	1,2,3,4,7,8-HxCDF	6.371e+05	1.23 y	42:49	1.257	9.394	9.3937	0.94	-	0.06
5	Unk	1,2,3,6,7,8-HxCDF	2.746e+05	1.28 y	42:56	1.190	3.405	3.4045	0.34	-	0.06
6	Unk	2,3,4,6,7,8-HxCDF	1.354e+05	1.15 y	43:28	1.239	2.047	2.0470	0.20	-	0.07
7	Unk	1,2,3,7,8,9-HxCDF	4.600e+04	1.19 y	44:07	1.289	0.791	0.7905	0.08	-	0.09
8	Unk	1,2,3,4,6,7,8-HpCDF	5.600e+05	1.07 y	45:35	1.635	9.419	9.4186	0.09	-	0.05
9	Unk	1,2,3,4,7,8,9-HpCDF	2.605e+04	1.03 y	46:50	1.760	1.349	1.3486	0.01	-	0.19
10	Unk	OCDF	4.120e+04	0.86 y	49:20	1.574	2.414	2.4142	0.00	-	0.05
11	Unk	2,3,7,8-TCDD	9.255e+03	0.71 y	31:33	0.953	0.209	0.2088	0.21	-	0.00
12	Unk	1,2,3,7,8-PeCDD	2.468e+04	1.62 y	39:22	1.206	0.688	0.6878	0.34	-	0.02
13	Unk	1,2,3,4,7,8-HxCDD	1.630e+04	1.18 y	43:37	1.141	0.456	0.4565	0.05	-	0.00
14	Unk	1,2,3,6,7,8-HxCDD	3.093e+04	1.20 y	43:42	0.911	0.619	0.6188	0.06	-	0.00
15	Unk	1,2,3,7,8,9-HxCDD	3.262e+04	1.39 y	43:57	1.054	0.718	0.7180	0.07	-	0.00
16	Unk	1,2,3,4,6,7,8-HpCDD	4.000e+04	1.00 y	46:29	1.087	2.098	2.0985	0.02	-	0.00
17	Unk	OCDD	5.631e+04	0.85 y	49:13	1.233	4.210	4.2104	0.00	-	0.12
18	IS/R	13C-2,3,7,8-TCDF	8.797e+06	0.79 y	30:14	1.871	80.124	80.1243	-	80.1	0.00
19	IS	13C-1,2,3,7,8-PeCDF	6.420e+06	1.70 y	37:15	1.287	84.988	84.9880	-	85.0	0.00
20	IS	13C-2,3,4,7,8-PeCDF	6.146e+06	1.68 y	38:39	1.295	80.867	80.8672	-	80.9	0.00
21	IS	13C-1,2,3,4,7,8-HxCDF	5.395e+06	0.47 y	42:48	0.950	117.847	117.8473	-	117.8	0.00
22	IS	13C-1,2,3,6,7,8-HxCDF	6.777e+06	0.48 y	42:55	1.675	83.957	83.9571	-	84.0	0.00
23	IS	13C-2,3,4,6,7,8-HxCDF	5.341e+06	0.47 y	43:28	1.356	81.710	81.7100	-	81.7	0.00
24	IS	13C-1,2,3,7,8,9-HxCDF	4.513e+06	0.47 y	44:06	1.004	93.288	93.2880	-	93.3	0.00
25	IS	13C-1,2,3,4,6,7,8-HpCDF	3.636e+06	0.38 y	45:35	0.928	81.293	81.2927	-	81.3	0.15
26	IS	13C-1,2,3,4,7,8,9-HpCDF	1.098e+06	0.38 y	46:49	0.719	31.658	31.6581	-	31.7	0.19
27	IS	13C-2,3,7,8-TCDD	4.652e+06	0.76 y	31:32	0.931	85.123	85.1230	-	85.1	0.05
28	IS	13C-1,2,3,7,8-PeCDD	2.976e+06	1.69 y	39:21	0.575	88.250	88.2503	-	88.3	0.00
29	IS	13C-1,2,3,4,7,8-HxCDD	3.129e+06	1.32 y	43:37	0.616	105.442	105.4416	-	105.4	0.00
30	IS	13C-1,2,3,6,7,8-HxCDD	5.488e+06	1.29 y	43:41	1.423	80.042	80.0420	-	80.0	0.00
31	IS	13C-1,2,3,4,6,7,8-HpCDD	1.754e+06	1.02 y	46:29	0.889	40.922	40.9225	-	40.9	0.01
32	IS	13C-OCDD	2.169e+06	0.85 y	49:13	0.729	61.724	61.7242	-	30.9	0.06
33	RS	13C-1,2,3,4-TCDD	5.869e+06	0.76 y	31:11	-	66.855	66.8549	-	-	-
34	RS/R	13C-1,2,3,7,8,9-HxCDD	4.820e+06	1.32 y	43:57	-	68.325	68.3250	-	-	-
35	C/Up	37Cl-2,3,7,8-TCDD	8.314e+05	- -	31:33	1.204	11.762	11.7620	-	117.6	0.00
36	Tot	Total Tetra-Furans	2.315e+06	0.81 y	25:08	0.809	32.524	32.5236	-	-	0.01
37	Tot	Total Tetra-Dioxins	1.354e+05	0.76 y	27:21	0.953	3.055	3.0547	-	-	0.00
38	Tot	Total Penta-Furans	2.109e+06	1.63 y	33:45	1.094	30.666	30.6663	-	-	0.01
39	Tot	Total Penta-Dioxins	1.467e+05	1.57 y	36:05	1.206	4.088	4.0878	-	-	0.02
40	Tot	Total Hexa-Furans	6.412e+05	1.30 y	41:41	1.236	9.423	9.4226	-	-	0.07
41	Tot	Total Hexa-Dioxins	1.231e+05	1.23 y	42:21	1.005	2.842	2.8423	-	-	0.00
42	Tot	Total Hepta-Furans	*	* n	NotFn	1.689	*	*	-	-	0.00
43	Tot	Total Hepta-Dioxins	2.966e+04	1.07 y	45:52	1.087	1.556	1.5559	-	-	0.00

NJDEP SDG B-20

ATTACHMENT KK-19

Run #3 Filename H03126H3 Samp: 10 Inj: 1 Acquired: 12-MAR-96 21: 7:27

Processed: 13-Mar-96 09:56:31 Comments: NJDEP/DPSFR/ENSA B-1N SN:67856

	Typ	Name	M/Z#1	M/Z#2	m1 RESP.	m2 RESP.	m1Height	m2Height	m1 Noise	m2 Noise	m1 S/N	m2 S/N	Det Lim	Eqn
1	Unk	2,3,7,8-TCDF	303.90	305.90	4.15e+05	5.24e+05	5.38e+04	6.72e+04	0.00e+00	1.60e+01	Div0	4.20e+03	0.01	Mean
2	Unk	1,2,3,7,8-PeCDF	339.86	341.86	1.84e+05	1.15e+05	2.37e+04	1.51e+04	3.20e+01	0.00e+00	7.41e+02	Div0	0.01	Mean
3	Unk	2,3,4,7,8-PeCDF	339.86	341.86	3.31e+05	2.09e+05	5.26e+04	3.34e+04	3.20e+01	0.00e+00	1.64e+03	Div0	0.01	Mean
4	Unk	1,2,3,4,7,8-HxCDF	373.82	375.82	3.51e+05	2.86e+05	8.86e+04	6.36e+04	2.68e+02	9.60e+01	3.31e+02	6.62e+02	0.06	Mean
5	Unk	1,2,3,6,7,8-HxCDF	373.82	375.82	1.54e+05	1.20e+05	4.04e+04	3.21e+04	2.68e+02	9.60e+01	1.51e+02	3.34e+02	0.06	Mean
6	Unk	2,3,4,6,7,8-HxCDF	373.82	375.82	7.23e+04	6.31e+04	2.42e+04	1.72e+04	2.68e+02	9.60e+01	9.01e+01	1.80e+02	0.07	Mean
7	Unk	1,2,3,7,8,9-HxCDF	373.82	375.82	2.50e+04	2.10e+04	4.04e+03	4.12e+03	2.68e+02	9.60e+01	1.51e+01	4.30e+01	0.09	Mean
8	Unk	1,2,3,4,6,7,8-HpCDF	407.78	409.78	2.90e+05	2.70e+05	4.78e+04	4.40e+04	6.40e+01	8.00e+01	7.46e+02	5.50e+02	0.05	Mean
9	Unk	1,2,3,4,7,8,9-HpCDF	407.78	409.78	1.32e+04	1.28e+04	1.93e+03	2.00e+03	6.40e+01	8.00e+01	3.02e+01	2.50e+01	0.19	Mean
10	Unk	OCDF	441.74	443.74	1.91e+04	2.21e+04	2.25e+03	2.44e+03	0.00e+00	2.40e+01	Div0	1.02e+02	0.05	Mean
11	Unk	2,3,7,8-TCDD	319.90	321.89	3.86e+03	5.40e+03	6.75e+02	9.06e+02	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
12	Unk	1,2,3,7,8-PeCDD	355.86	357.85	1.53e+04	9.43e+03	2.35e+03	1.38e+03	3.60e+01	0.00e+00	6.52e+01	Div0	0.02	Mean
13	Unk	1,2,3,4,7,8-HxCDD	389.82	391.81	8.83e+03	7.47e+03	2.80e+03	2.60e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
14	Unk	1,2,3,6,7,8-HxCDD	389.82	391.81	1.69e+04	1.40e+04	4.79e+03	4.03e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
15	Unk	1,2,3,7,8,9-HxCDD	389.82	391.81	1.90e+04	1.37e+04	5.45e+03	3.78e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
16	Unk	1,2,3,4,6,7,8-HpCDD	423.78	425.77	2.00e+04	2.00e+04	3.16e+03	2.91e+03	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
17	Unk	OCDD	457.74	459.74	2.59e+04	3.04e+04	2.99e+03	3.64e+03	1.60e+01	3.60e+01	1.87e+02	1.01e+02	0.12	Mean
18	IS/R	13C-2,3,7,8-TCDF	315.94	317.94	3.87e+06	4.92e+06	6.17e+05	7.71e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
19	IS	13C-1,2,3,7,8-PeCDF	351.90	353.90	4.04e+06	2.38e+06	6.39e+05	3.83e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
20	IS	13C-2,3,4,7,8-PeCDF	351.90	353.90	3.86e+06	2.29e+06	6.53e+05	3.83e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
21	IS	13C-1,2,3,4,7,8-HxCDF	383.86	385.86	1.73e+06	3.67e+06	5.94e+05	1.22e+06	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
22	IS	13C-1,2,3,6,7,8-HxCDF	383.86	385.86	2.20e+06	4.57e+06	6.78e+05	1.32e+06	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
23	IS	13C-2,3,4,6,7,8-HxCDF	383.86	385.86	1.72e+06	3.62e+06	5.21e+05	1.12e+06	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
24	IS	13C-1,2,3,7,8,9-HxCDF	383.86	385.86	1.44e+06	3.08e+06	4.08e+05	8.46e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
25	IS	13C-1,2,3,4,6,7,8-HpCDF	417.82	419.82	1.00e+06	2.64e+06	1.86e+05	4.94e+05	3.32e+02	1.72e+02	5.59e+02	2.87e+03	0.15	Mean
26	IS	13C-1,2,3,4,7,8,9-HpCDF	417.82	419.82	3.00e+05	7.97e+05	4.52e+04	1.28e+05	3.32e+02	1.72e+02	1.36e+02	7.46e+02	0.19	Mean
27	IS	13C-2,3,7,8-TCDD	331.94	333.93	2.01e+06	2.64e+06	3.18e+05	4.13e+05	1.16e+02	0.00e+00	2.74e+03	Div0	0.05	Mean
28	IS	13C-1,2,3,7,8-PeCDD	367.89	369.89	1.87e+06	1.11e+06	3.01e+05	1.78e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
29	IS	13C-1,2,3,4,7,8-HxCDD	401.86	403.85	1.78e+06	1.35e+06	6.58e+05	5.23e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
30	IS	13C-1,2,3,6,7,8-HxCDD	401.86	403.85	3.09e+06	2.40e+06	9.04e+05	7.09e+05	0.00e+00	0.00e+00	Div0	Div0	0.00	Mean
31	IS	13C-1,2,3,4,6,7,8-HpCDD	435.82	437.81	8.82e+05	8.66e+05	1.42e+05	1.37e+05	0.00e+00	2.00e+01	Div0	6.85e+03	0.01	Mean
32	IS	13C-OCDD	469.78	471.77	9.94e+05	1.18e+06	1.25e+05	1.46e+05	1.24e+02	4.00e+01	1.01e+03	3.65e+03	0.06	Mean
33	RS	13C-1,2,3,4-TCDD	331.94	333.93	2.54e+06	3.33e+06	4.26e+05	5.59e+05	1.16e+02	0.00e+00	3.67e+03	Div0	-	Mean
34	RS/R	13C-1,2,3,7,8,9-HxCDD	401.86	403.85	2.94e+06	2.21e+06	8.36e+05	6.28e+05	0.00e+00	0.00e+00	Div0	Div0	-	Mean
35	C/Up	37Cl-2,3,7,8-TCDD	327.88		8.31e+05		1.30e+05		0.00e+00		Div0		0.00	Mean

NJDEP SDG B-20

ATTACHMENT KK-20

010032

PEAK-LIST: Total Tetra-Furans Entry #: 36

Run: 3 File: H03126H3 S: 10 I: 1 F: 1
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 3.291e+06

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	25:08	7.746e+03	9.543e+03	0.81 y	1.729e+04	Div0	87.2	
2	25:55	1.709e+04	1.894e+04	0.90 n	3.603e+04	Div0	177.9	
3	26:21	9.101e+03	1.232e+04	0.74 y	2.142e+04	Div0	102.8	
4	26:52	1.180e+05	1.450e+05	0.81 y	2.630e+05	Div0	1006.3	
5	27:27	1.134e+05	1.364e+05	0.83 y	2.498e+05	Div0	851.8	
6	28:03	2.102e+05	2.695e+05	0.78 y	4.797e+05	Div0	2092.8	
7	28:34	9.146e+04	1.120e+05	0.82 y	2.035e+05	Div0	750.0	
8	28:57	7.660e+04	9.260e+04	0.83 y	1.692e+05	Div0	517.5	
9	29:31	1.495e+05	1.890e+05	0.79 y	3.385e+05	Div0	1767.2	
10	29:55	8.020e+04	9.424e+04	0.85 y	1.744e+05	Div0	842.6	
11	30:16	4.148e+05	5.243e+05	0.79 y	9.391e+05	Div0	4197.0	2,3,7,8-TCDF
12	31:00	1.393e+05	1.662e+05	0.84 y	3.055e+05	Div0	1579.8	
13	31:22	3.510e+04	4.146e+04	0.85 y	7.656e+04	Div0	324.1	
14	33:10	6.818e+03	9.771e+03	0.70 y	1.659e+04	Div0	91.6	

PEAK-LIST: Total Tetra-Dioxins Entry #: 37

Run: 3 File: H03126H3 S: 10 I: 1 F: 1
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 2.297e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	27:21	1.949e+04	2.572e+04	0.76 y	4.521e+04	Div0	Div0	
2	27:57	1.218e+04	1.710e+04	0.71 y	2.928e+04	Div0	Div0	
3	28:11	8.346e+02	1.089e+03	0.77 y	1.924e+03	Div0	Div0	
4	28:27	2.403e+03	3.879e+03	0.62 n	6.281e+03	Div0	Div0	
5	29:35	1.957e+04	2.206e+04	0.89 n	4.162e+04	Div0	Div0	
6	29:50	3.353e+03	4.982e+03	0.67 y	8.335e+03	Div0	Div0	
7	30:02	5.306e+03	6.265e+03	0.85 y	1.157e+04	Div0	Div0	
8	30:39	6.998e+03	7.476e+03	0.94 n	1.447e+04	Div0	Div0	
9	31:12	5.087e+03	6.887e+03	0.74 y	1.197e+04	Div0	Div0	
10	31:24	1.151e+04	1.562e+04	0.74 y	2.713e+04	Div0	Div0	
11	31:33	3.855e+03	5.400e+03	0.71 y	9.255e+03	Div0	Div0	2,3,7,8-TCDD
12	31:50	4.771e+03	4.465e+03	1.07 n	9.236e+03	Div0	Div0	
13	32:09	4.767e+03	4.720e+03	1.01 n	9.487e+03	Div0	Div0	
14	32:37	8.165e+02	1.270e+03	0.64 n	2.087e+03	-	-	
15	33:15	8.883e+02	9.129e+02	0.97 n	1.801e+03	Div0	Div0	

PEAK-LIST: Total Penta-Furans Entry #: 38

Run: 3 File: H03126H3 S: 10 I: 1 F: 2
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 2.948e+06

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	33:45	5.347e+04	3.275e+04	1.63 y	8.622e+04	248.3	Div0	
2	35:31	1.960e+04	1.195e+04	1.64 y	3.154e+04	97.2	Div0	

3	35:46	7.810e+05	4.755e+05	1.64 y	1.256e+06	3252.4	Div0	
4	36:03	9.356e+04	5.649e+04	1.66 y	1.501e+05	427.5	Div0	
5	36:43	7.551e+04	4.555e+04	1.66 y	1.211e+05	257.5	Div0	
6	37:17	1.837e+05	1.155e+05	1.59 y	2.992e+05	740.9	Div0	1,2,3,7,8-PeCDF
7	37:35	5.489e+04	3.408e+04	1.61 y	8.897e+04	246.8	Div0	
8	37:51	1.076e+05	6.466e+04	1.66 y	1.723e+05	513.3	Div0	
9	38:40	3.312e+05	2.087e+05	1.59 y	5.399e+05	1643.0	Div0	2,3,4,7,8-PeCDF
10	38:55	1.224e+05	7.990e+04	1.53 y	2.023e+05	511.9	Div0	

PEAK-LIST: Total Penta-Dioxins Entry #: 39

Run: 3 File: H03126H3 S: 10 I: 1 F: 2
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 1.975e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	36:05	2.743e+04	1.749e+04	1.57 y	4.491e+04	109.9	Div0	
2	36:55	2.146e+03	1.906e+03	1.13 n	4.052e+03	8.3	Div0	
3	37:25	2.324e+04	1.435e+04	1.62 y	3.759e+04	105.9	Div0	
4	37:41	5.835e+03	4.342e+03	1.34 y	1.018e+04	26.3	Div0	
5	37:57	1.894e+04	1.191e+04	1.59 y	3.085e+04	75.0	Div0	
6	38:18	2.193e+03	1.483e+03	1.48 y	3.676e+03	11.0	Div0	
7	38:26	6.187e+03	3.065e+03	2.02 n	9.252e+03	22.1	Div0	
8	38:50	6.838e+03	5.946e+03	1.15 n	1.278e+04	29.2	Div0	
9	39:00	2.490e+03	1.550e+03	1.61 y	4.040e+03	12.7	Div0	
10	39:22	1.525e+04	9.431e+03	1.62 y	2.468e+04	65.2	Div0	1,2,3,7,8-PeCDD
11	39:41	3.727e+03	2.628e+03	1.42 y	6.355e+03	11.8	Div0	
12	40:13	5.717e+03	3.357e+03	1.70 y	9.074e+03	21.4	Div0	

PEAK-LIST: Total Hexa-Furans Entry #: 40

Run: 3 File: H03126H3 S: 10 I: 1 F: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 1.764e+06

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	41:41	1.920e+04	1.475e+04	1.30 y	3.395e+04	19.8	37.5	
2	41:52	2.982e+05	2.276e+05	1.31 y	5.257e+05	306.1	629.3	
3	42:02	1.926e+04	1.480e+04	1.30 y	3.406e+04	16.5	38.0	
4	42:12	1.873e+04	1.073e+04	1.75 n	2.946e+04	16.1	34.5	
5	42:49	3.512e+05	2.859e+05	1.23 y	6.371e+05	330.5	662.5	1,2,3,4,7,8-HxCDF
6	42:56	1.543e+05	1.203e+05	1.28 y	2.746e+05	150.9	334.5	1,2,3,6,7,8-HxCDF
7	43:15	2.723e+04	2.022e+04	1.35 y	4.745e+04	16.6	42.2	
8	43:28	7.233e+04	6.310e+04	1.15 y	1.354e+05	90.1	179.5	2,3,4,6,7,8-HxCDF
9	44:07	2.500e+04	2.100e+04	1.19 y	4.600e+04	15.1	43.0	1,2,3,7,8,9-HxCDF

PEAK-LIST: Total Hexa-Dioxins Entry #: 41

Run: 3 File: H03126H3 S: 10 I: 1 F: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 2.130e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name

1	42:21	1.130e+04	9.170e+03	1.23 y	2.047e+04	Div0	Div0	
2	42:32	1.621e+03	1.550e+03	1.05 n	3.171e+03	Div0	Div0	
3	42:51	3.066e+04	2.641e+04	1.16 y	5.706e+04	Div0	Div0	
4	43:06	2.561e+04	1.996e+04	1.28 y	4.557e+04	Div0	Div0	
5	43:13	3.491e+03	3.394e+03	1.03 n	6.884e+03	Div0	Div0	
6	43:37	8.833e+03	7.471e+03	1.18 y	1.630e+04	Div0	Div0	1,2,3,4,7,8-HxCDD
7	43:42	1.690e+04	1.403e+04	1.20 y	3.093e+04	Div0	Div0	1,2,3,6,7,8-HxCDD
8	43:57	1.896e+04	1.366e+04	1.39 y	3.262e+04	Div0	Div0	1,2,3,7,8,9-HxCDD

PEAK-LIST: Total Hepta-Furans Entry #: 42

Run: 3 File: H03126H3 S: 10 I: 1 F: 4
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 6.372e+05

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	45:35	2.900e+05	2.700e+05	1.07 y	5.600e+05	746.2	549.6	1,2,3,4,6,7,8-HpCDF
2	45:48	2.848e+04	2.266e+04	1.26 n	5.113e+04	70.3	47.2	
3	46:50	1.323e+04	1.282e+04	1.03 y	2.605e+04	30.2	25.0	1,2,3,4,7,8,9-HpCDF

PEAK-LIST: Total Hepta-Dioxins Entry #: 43

Run: 3 File: H03126H3 S: 10 I: 1 F: 4
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

SAMPLE NO.: NJDEP/DPSFR/ENSA B-1N SN:67856 Resp: 6.966e+04

#	RT	m1 Resp	m2 Resp	RA	Tot.Resp.	m1 S/N	m2 S/N	Name
1	45:52	1.535e+04	1.431e+04	1.07 y	2.966e+04	Div0	Div0	
2	46:29	2.000e+04	2.000e+04	1.00 y	4.000e+04	Div0	Div0	1,2,3,4,6,7,8-HpCDD

Totals Class: Total Tetra-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:1
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 32.52 of which * named and 32.524 unnamed
Conc: 32.524 of which * named and 32.524 unnamed

303.902 305.899

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	25:08	7.746e+03	9.543e+03	0.81 y	1.729e+04	1.729e+04	Div0	87.2	0.243	0.243	
2	26:21	9.101e+03	1.232e+04	0.74 y	2.142e+04	2.142e+04	Div0	102.8	0.301	0.301	
3	26:52	1.180e+05	1.450e+05	0.81 y	2.630e+05	2.630e+05	Div0	1006.3	3.694	3.694	
4	27:27	1.134e+05	1.364e+05	0.83 y	2.498e+05	2.498e+05	Div0	851.8	3.508	3.508	
5	28:03	2.102e+05	2.695e+05	0.78 y	4.797e+05	4.797e+05	Div0	2092.8	6.738	6.738	
6	28:34	9.146e+04	1.120e+05	0.82 y	2.035e+05	2.035e+05	Div0	750.0	2.858	2.858	
7	28:57	7.660e+04	9.260e+04	0.83 y	1.692e+05	1.692e+05	Div0	517.5	2.377	2.377	
8	29:31	1.495e+05	1.890e+05	0.79 y	3.385e+05	3.385e+05	Div0	1767.2	4.755	4.755	
9	29:55	8.020e+04	9.424e+04	0.85 y	1.744e+05	1.744e+05	Div0	842.6	2.450	2.450	
10	31:00	1.393e+05	1.662e+05	0.84 y	3.055e+05	3.055e+05	Div0	1579.8	4.291	4.291	
11	31:22	3.510e+04	4.146e+04	0.85 y	7.656e+04	7.656e+04	Div0	324.1	1.075	1.075	
12	33:10	6.818e+03	9.771e+03	0.70 y	1.659e+04	1.659e+04	Div0	91.6	0.233	0.233	

Totals Class: Total Tetra-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:1
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 3.05 of which * named and 3.055 unnamed
Conc: 3.055 of which * named and 3.055 unnamed

319.897 321.894

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	27:21	1.949e+04	2.572e+04	0.76 y	4.521e+04	4.521e+04	Div0	Div0	1.020	1.020	
2	27:57	1.218e+04	1.710e+04	0.71 y	2.928e+04	2.928e+04	Div0	Div0	0.660	0.660	
3	28:11	8.346e+02	1.089e+03	0.77 y	1.924e+03	1.924e+03	Div0	Div0	0.043	0.043	
4	29:50	3.353e+03	4.982e+03	0.67 y	8.335e+03	8.335e+03	Div0	Div0	0.188	0.188	
5	30:02	5.306e+03	6.265e+03	0.85 y	1.157e+04	1.157e+04	Div0	Div0	0.261	0.261	
6	31:12	5.087e+03	6.887e+03	0.74 y	1.197e+04	1.197e+04	Div0	Div0	0.270	0.270	
7	31:24	1.151e+04	1.562e+04	0.74 y	2.713e+04	2.713e+04	Div0	Div0	0.612	0.612	

Totals Class: Total Penta-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:2
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 30.67 of which * named and 30.666 unnamed
Conc: 30.666 of which * named and 30.666 unnamed

339.860 341.857

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	33:45	5.347e+04	3.275e+04	1.63 y	8.622e+04	8.622e+04	248.3	Div0	1.254	1.254	
2	35:31	1.960e+04	1.195e+04	1.64 y	3.154e+04	3.154e+04	97.2	Div0	0.459	0.459	
3	35:46	7.810e+05	4.755e+05	1.64 y	1.256e+06	1.256e+06	3252.4	Div0	18.271	18.271	
4	36:03	9.356e+04	5.649e+04	1.66 y	1.501e+05	1.501e+05	427.5	Div0	2.182	2.182	
5	36:43	7.551e+04	4.555e+04	1.66 y	1.211e+05	1.211e+05	257.5	Div0	1.760	1.760	
6	37:35	5.489e+04	3.408e+04	1.61 y	8.897e+04	8.897e+04	246.8	Div0	1.294	1.294	
7	37:51	1.076e+05	6.466e+04	1.66 y	1.723e+05	1.723e+05	513.3	Div0	2.505	2.505	
8	38:55	1.224e+05	7.990e+04	1.53 y	2.023e+05	2.023e+05	511.9	Div0	2.941	2.941	

Totals Class: Total Penta-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:2
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 4.09 of which * named and 4.088 unnamed
Conc: 4.088 of which * named and 4.088 unnamed

355.855 357.852

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	36:05	2.743e+04	1.749e+04	1.57 y	4.491e+04	4.491e+04	109.9	Div0	1.252	1.252	
2	37:25	2.324e+04	1.435e+04	1.62 y	3.759e+04	3.759e+04	105.9	Div0	1.048	1.048	
3	37:41	5.835e+03	4.342e+03	1.34 y	1.018e+04	1.018e+04	26.3	Div0	0.284	0.284	
4	37:57	1.894e+04	1.191e+04	1.59 y	3.085e+04	3.085e+04	75.0	Div0	0.860	0.860	
5	38:18	2.193e+03	1.483e+03	1.48 y	3.676e+03	3.676e+03	11.0	Div0	0.102	0.102	
6	39:00	2.490e+03	1.550e+03	1.61 y	4.040e+03	4.040e+03	12.7	Div0	0.113	0.113	
7	39:41	3.727e+03	2.628e+03	1.42 y	6.355e+03	6.355e+03	11.8	Div0	0.177	0.177	
8	40:13	5.717e+03	3.357e+03	1.70 y	9.074e+03	9.074e+03	21.4	Div0	0.253	0.253	

Totals Class: Total Hexa-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:3
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 9.42 of which * named and 9.423 unnamed
Conc: 9.423 of which * named and 9.423 unnamed

373.821 375.818

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	41:41	1.920e+04	1.475e+04	1.30 y	3.395e+04	3.395e+04	19.8	37.5	0.499	0.499	
2	41:52	2.982e+05	2.276e+05	1.31 y	5.257e+05	5.257e+05	306.1	629.3	7.726	7.726	
3	42:02	1.926e+04	1.480e+04	1.30 y	3.406e+04	3.406e+04	16.5	38.0	0.501	0.501	
4	43:15	2.723e+04	2.022e+04	1.35 y	4.745e+04	4.745e+04	16.6	42.2	0.697	0.697	

Totals Class: Total Hexa-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:3
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 2.84 of which * named and 2.842 unnamed
Conc: 2.842 of which * named and 2.842 unnamed

389.816 391.813

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	42:21	1.130e+04	9.170e+03	1.23 y	2.047e+04	2.047e+04	Div0	Div0	0.473	0.473	
2	42:51	3.066e+04	2.641e+04	1.16 y	5.706e+04	5.706e+04	Div0	Div0	1.317	1.317	
3	43:06	2.561e+04	1.996e+04	1.28 y	4.557e+04	4.557e+04	Div0	Div0	1.052	1.052	

Totals Class: Total Hepta-Furans

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:4
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: * of which * named and * unnamed
Conc: * of which * named and * unnamed

407.782 409.779

#	RT	m1 Resp	m2 Resp	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	NotF»	*	*	* n	*	*	Div0	Div0	*	*	

Totals Class: Total Hepta-Dioxins

SAMPLE NAME.: NJDEP/DPSFR/ENSA B-1N SN:67856
File Name: H03126H3_S:10 I:1 F:4
Run: 3
Acquired: 12-MAR-96 21: 7:27 Processed: 13-Mar-96 09:56:31

Amount: 1.56 of which * named and 1.556 unnamed
Conc: 1.556 of which * named and 1.556 unnamed

#	RT	m1 Resp (423.777)	m2 Resp (425.774)	RA	Tot	Corr	m1 S/N	m2 S/N	pg/ul	TOT.	Name
1	45:52	1.535e+04	1.431e+04	1.07 y	2.966e+04	2.966e+04	Div0	Div0	1.556	1.556	

NJDEP SDG B-20

ATTACHMENT KK-27

ATTACHMENT LL

JOHN USMIANI 584-4298

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

MEMORANDUM

MAY 0 8 1996

TO: Kris Geller
Environmental Evaluation Section
Bureau of Environmental Evaluation and Risk Assessment

FROM: Greg Toffoli
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Validation of Polychlorinated Dibenzo-p-Dioxin/Polychlorinated Dibenzofuran (PCDD/PCDF) sample data generated from the **Paperboard Specialties Inc., Paterson** site. Samples were analyzed by Southwest Research Institute. Samples reviewed were:

Field ID	Lab ID	Date Sampled	Matrix
B-20	67855	02/29/1996	Waste
B-1N	67856	02/29/1996	Waste

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above noted sample data according to the requirements specified in USEPA Method 1613, Revision B. Comments are as follows.

Copies of the sample data summaries (containing data for the isomer-specific analytical results, PCDD and PCDF totals results and the Carbon-13 labeled standard percent recoveries) and the PCDD/PCDF Toxicity Equivalence Summary have been attached. (Any reported values requiring correction have been changed and footnoted by QAS on the attached results summaries). Other than the discrepancy/qualification noted below, the data are acceptable.

The laboratory used their own acceptance criteria and not the criteria specified in the method for evaluating the Laboratory Control Sample (i.e. the ongoing Precision and Recovery Standard). In this instance, there is no effect on the data due to this inconsistency as the results of the Laboratory Control Sample met both their own criteria and the method specified criteria.

ATTACHMENT LL-1

J4 page 2

Southwest Research Institute

Dioxin/Dibenzofuran Analysis Report

010002

Sample ID

B-20

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 10.0 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67855
Lab File Name: H03126H3_9
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 77%

CAS No.	ANALYTE	CONC	Q	EMPC	EDL	CRQL	RATIO	RT	FOOTNOTES
1746-01-6	2,3,7,8-TCDD	ND		0.517		1.30			
40321-76-4	1,2,3,7,8-PeCDD	ND		2.28		6.49			
39227-28-6	1,2,3,4,7,8-HxCDD	~~2.27~~	J	NEGATE		6.49	1.17	43:38	2
57653-85-7	1,2,3,6,7,8-HxCDD	~~2.84~~	J	NEGATE		6.49	1.18	43:42	2
19408-74-3	1,2,3,7,8,9-HxCDD	~~3.39~~	J	NEGATE		6.49	1.31	43:58	2
35822-46-9	1,2,3,4,6,7,8-HpCDD	12.1				6.49	0.970	46:29	3
3268-87-9	OCDD	31.1				13.0	0.900	49:15	3
51207-31-9	2,3,7,8-TCDF	12.4		QUALIFY		1.30	0.810	30:20	1
57117-41-6	1,2,3,7,8-PeCDF	3.24	J			6.49	1.49	37:19	3
57117-31-4	2,3,4,7,8-PeCDF	6.95				6.49	1.54	38:41	3
70648-26-9	1,2,3,4,7,8-HxCDF	9.94				6.49	1.25	42:50	3
57117-44-9	1,2,3,6,7,8-HxCDF	4.43	J			6.49	1.37	42:56	3
72918-21-9	1,2,3,7,8,9-HxCDF	~~2.52~~	J	NEGATE		6.49	1.22	44:08	2
60851-34-5	2,3,4,6,7,8-HxCDF	5.12	J			6.49	1.37	43:29	
67562-39-4	1,2,3,4,6,7,8-HpCDF	24.8				6.49	1.09	45:36	
55673-89-7	1,2,3,4,7,8,9-HpCDF	~~3.93~~	J	NEGATE		6.49	1.13	46:50	2
39001-02-0	OCDF	~~16.1~~		NEGATE		13.0	0.830	49:22	2

Total Dioxin	CONC [4]	Number	Total Dibenzofuran	CONC [4]	Number
Total Tetra-Dioxins	49.0		Total Tetra-Furans	49.8	
Total Penta-Dioxins	35.6		Total Penta-Furans	48.7	
Total Hexa-Dioxins	~~33.7~~ 25.2		Total Hexa-Furans	~~36.1~~ 33.6	
Total Hepta-Dioxins	31.1		Total Hepta-Furans	~~28.7~~ 24.8	

Internal Standard % Recovery

13C-2,3,7,8-TCDD:	97.9	13C-1,2,3,7,8-PeCDD:	75.4	13C-1,2,3,4,7,8-HxCDD:	98.0
13C-1,2,3,6,7,8-HxCDD:	81.5	13C-1,2,3,4,6,7,8-HpCDD:	26.0	13C-OCDD:	48.8
13C-2,3,7,8-TCDF:	88.2	13C-1,2,3,7,8-PeCDF:	81.2	13C-2,3,4,7,8-PeCDF:	70.4
13C-1,2,3,4,7,8-HxCDF:	118	13C-1,2,3,6,7,8-HxCDF:	88.3	13C-1,2,3,7,8,9-HxCDF:	91.9
13C-2,3,4,6,7,8-HxCDF:	84.4	13C-1,2,3,4,6,7,8-HpCDF:	45.8	13C-1,2,3,4,7,8,9-HpCDF:	21.8

Clean-Up Standard % Recovery

37Cl-2,3,7,8-TCDD 140

ATTACHMENT LL-2

JU page 2

Southwest Research Institute 010029

Dioxin/Dibenzofuran Analysis Report

Sample ID: B-1N

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 5.00 g

Project: 01-7518-085
Date Received: 03/04/96
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 67856
Lab File Name: H03126H3_10
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 100%

CAS No.	ANALYTE	CONC	Q	EMPC	EDL	CRQL	RATIO	RT	FOOTNOTE
1746-01-6	2,3,7,8-TCDD	0.836	J			2.00	0.710	31:33	3
40321-76-4	1,2,3,7,8-PeCDD	~~2.75~~	J	NEGATE		10.0	1.62	39:22	2
39227-28-6	1,2,3,4,7,8-HxCDD	~~1.82~~	J	NEGATE		10.0	1.18	43:37	2
57653-85-7	1,2,3,6,7,8-HxCDD	~~2.48~~	J	NEGATE		10.0	1.20	43:42	2
19408-74-3	1,2,3,7,8,9-HxCDD	~~2.87~~	J	NEGATE		10.0	1.39	43:57	2
35822-46-9	1,2,3,4,6,7,8-HpCDD	~~8.59~~	J	NEGATE		10.0	1.00	46:29	2
3268-87-9	OCDD	~~16.8~~	J	NEGATE		20.0	0.850	49:13	2
51207-31-9	2,3,7,8-TCDF	52.8		QUANTY		2.00	0.790	30:16	1
57117-41-6	1,2,3,7,8-PeCDF	17.2				10.0	1.59	37:17	
57117-31-4	2,3,4,7,8-PeCDF	31.7				10.0	1.59	38:40	
70648-26-9	1,2,3,4,7,8-HxCDF	37.6				10.0	1.23	42:49	
57117-44-9	1,2,3,6,7,8-HxCDF	13.6				10.0	1.28	42:56	
72918-21-9	1,2,3,7,8,9-HxCDF	~~3.16~~	J	NEGATE		10.0	1.19	44:07	2
60851-34-5	2,3,4,6,7,8-HxCDF	8.19	J			10.0	1.15	43:28	3
67562-39-4	1,2,3,4,6,7,8-HpCDF	37.7				10.0	1:07	45:35	
55673-89-7	1,2,3,4,7,8,9-HpCDF	~~5.40~~	J	NEGATE		10.0	1.03	46:50	2
39001-02-0	OCDF	~~9.66~~	J	NEGATE		20.0	0.860	49:20	2

Total Dioxin	CONC[4]	Number	Total Dibenzofuran	CONC[4]	Number
Total Tetra-Dioxins	13.1		Total Tetra-Furans	183	
Total Penta-Dioxins	~~18.1~~ 16.3		Total Penta-Furans	172	
Total Hexa-Dioxins	~~18.5~~ 11.3		Total Hexa-Furans	~~100~~ 96.8	
Total Hepta-Dioxins	~~14.6~~ 6.2		Total Hepta-Furans	43.1 37.7	

Internal Standard % Recovery

13C-2,3,7,8-TCDD:	85.1	13C-1,2,3,7,8-PeCDD:	88.3	13C-1,2,3,4,7,8-HxCDD:	105
13C-1,2,3,6,7,8-HxCDD:	80.0	13C-1,2,3,4,6,7,8-HpCDD:	40.9	13C-OCDD:	30.9
13C-2,3,7,8-TCDF:	80.1	13C-1,2,3,7,8-PeCDF:	85.0	13C-2,3,4,7,8-PeCDF:	80.9
13C-1,2,3,4,7,8-HxCDF:	118	13C-1,2,3,6,7,8-HxCDF:	84.0	13C-1,2,3,7,8,9-HxCDF:	93.3
13C-2,3,4,6,7,8-HxCDF:	81.7	13C-1,2,3,4,6,7,8-HpCDF:	81.3	13C-1,2,3,4,7,8,9-HpCDF	31.7

Clean-Up Standard % Recovery

37Cl-2,3,7,8-TCDD 118

ATTACHMENT LL-3

Ju Kaye

010158

Southwest Research Institute
Dioxin/Dibenzofuran Analysis Report

Sample ID

BLANK

Client ID: NJDEP/DPSFR/ENSA
Case: NJDEP
SDG: B-20
Matrix: SOLID
Sample Wt/Vol: 10.0 g

Project: 01-7518-085
Date Received: N/A
Date Extracted: 03/05/96
Date Analyzed: 03/12/96
Concentration Unit: ng/kg

Lab Sample ID: 68310
Lab File Name: H03126H3_8
Final Extraction Vol: 20 uL
Dilution Factor: 1
% Dry Weight: 100%

CAS No.	ANALYTE	CONC	Q	EMPC	EDL	CRQL	RATIO	RT
1746-01-6	2,3,7,8-TCDD	ND		0.206		1.00		
40321-76-4	1,2,3,7,8-PeCDD	ND		1.19		5.00		
39227-28-6	1,2,3,4,7,8-HxCDD	1.63	J			5.00	1.16	43:38
57653-85-7	1,2,3,6,7,8-HxCDD	1.36	J			5.00	1.24	43:43
19408-74-3	1,2,3,7,8,9-HxCDD	1.49	J			5.00	1.34	43:59
35822-46-9	1,2,3,4,6,7,8-HpCDD	3.16	J			5.00	0.930	46:30
3268-87-9	OCDD	8.87	J			10.0	0.870	49:14
51207-31-9	2,3,7,8-TCDF	0.152	J			1.00	0.680	30:14
57117-41-6	1,2,3,7,8-PeCDF	0.916	J			5.00	1.43	37:21
57117-31-4	2,3,4,7,8-PeCDF	1.08	J			5.00	1.54	38:44
70648-26-9	1,2,3,4,7,8-HxCDF	1.09	J			5.00	1.21	42:50
57117-44-9	1,2,3,6,7,8-HxCDF	1.37	J			5.00	1.10	42:56
72918-21-9	1,2,3,7,8,9-HxCDF	1.87	J			5.00	1.25	44:08
60851-34-5	2,3,4,6,7,8-HxCDF	1.69	J			5.00	1.31	43:30
67562-39-4	1,2,3,4,6,7,8-HpCDF	2.75	J			5.00	1.03	45:37
55673-89-7	1,2,3,4,7,8,9-HpCDF	4.31	J			5.00	1.15	46:51
39001-02-0	OCDF	9.65	J			10.0	0.880	49:22

Total Dioxin	CONC	Number	Total Dibenzofuran	CONC	Number
Total Tetra-Dioxins	ND		Total Tetra-Furans	0.152	
Total Penta-Dioxins	ND		Total Penta-Furans	2.00	
Total Hexa-Dioxins	4.48		Total Hexa-Furans	6.02	
Total Hepta-Dioxins	3.39		Total Hepta-Furans	7.06	

Internal Standard % Recovery

13C-2,3,7,8-TCDD:	77.7	13C-1,2,3,7,8-PeCDD:	68.4	13C-1,2,3,4,7,8-HxCDD:	118
13C-1,2,3,6,7,8-HxCDD:	98.4	13C-1,2,3,4,6,7,8-HpCDD:	36.0	13C-OCDD:	27.2
13C-2,3,7,8-TCDF:	77.9	13C-1,2,3,7,8-PeCDF:	77.7	13C-2,3,4,7,8-PeCDF:	61.1
13C-1,2,3,4,7,8-HxCDF:	125	13C-1,2,3,6,7,8-HxCDF:	95.9	13C-1,2,3,7,8,9-HxCDF:	105
13C-2,3,4,6,7,8-HxCDF:	98.5	13C-1,2,3,4,6,7,8-HpCDF:	74.5	13C-1,2,3,4,7,8,9-HpCDF:	26.8

Clean-Up Standard % Recovery

37Cl-2,3,7,8-TCDD 113

ATTACHMENT LL-4

JU Pg 5

Footnotes

1. The laboratory did not demonstrate 2,3,7,8-TCDF can be separated from the other TCDF isomers. The result is qualified with an unknown bias.

2. The value reported in the sample is less than or equal to three times the value found in the associated method blank. It is the policy of DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

3. The value reported in the sample is greater than three times the value found in the associated method blank. Although the value reported is considered real, the end user is alerted that the compound was found in the associated blank.

4. The total PCDD/PCDF concentration was corrected by the amount found in the method blank.

5. The total Toxicity Equivalence Summary adjusted value has been corrected by the amount found in the method blank.

ATTACHMENT LL-5

ATTACHMENT MM

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5093

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-1

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC1S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5093

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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FORM I VOA-TIC 3/90

ATTACHMENT MM-2

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5097

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-3

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC1S	RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5097

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
2.				
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FORM I VOA-TIC 3/90

ATTACHMENT MM-4

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: I8131

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	.9	J
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	24.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	24.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	24.	U
83-32-9	Acenaphthene	.7	J

ATTACHMENT MM-5

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: I8131

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	24.	U
100-02-7	4-Nitrophenol	24.	U
132-64-9	Dibenzofuran	2.	J
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	2.	J
100-01-6	4-Nitroaniline	24.	U
534-52-1	4,6-Dinitro-2-methylphenol	24.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	24.	U
85-01-8	Phenanthrene	1.	J
120-12-7	Anthracene	10.	U
86-74-8	Carbazole	10.	U
84-74-2	Di-n-butylphthalate	.8	BJ
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	10.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	10.	U
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

ATTACHMENT MM-6

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC1S	RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: I8153

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 22

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	61141-72-8	DIMETHYL DODECANE	10.61	7.	J
2.	91-57-6	METHYL NAPHTHALENE	10.94	20.	J
3.	- -	UNKNOWN	11.10	10.	J
4.	- -	UNKNOWN	11.30	10.	J
5.	- -	UNKNOWN ALKANE	12.08	9.	J
6.	- -	UNKNOWN HYDROCARBON	12.29	20.	J
7.	- -	UNKNOWN HYDROCARBON	12.54	20.	J
8.	- -	UNKNOWN HYDROCARBON	12.68	10.	J
9.	- -	UNKNOWN HYDROCARBON	12.90	6.	J
10.	- -	UNKNOWN HYDROCARBON	13.45	5.	J
11.	- -	UNKNOWN HYDROCARBON	14.11	5.	J
12.	- -	UNKNOWN ALKANE	15.50	30.	J
13.	- -	UNKNOWN ALKANE	16.16	70.	J
14.	- -	UNKNOWN ALKANE	17.28	50.	J
15.	- -	UNKNOWN ALKANE	18.14	20.	J
16.	57-10-3	HEXADECANOIC ACID	19.24	60.	BJ
17.	- -	UNKNOWN ALKANE	19.94	9.	J
18.	- -	UNKNOWN	21.01	10.	J
19.	- -	UNKNOWN	22.08	8.	J
20.	- -	UNKNOWN HYDROCARBON	23.57	8.	J
21.	- -	UNKNOWN HYDROCARBON	24.01	10.	J
22.	- -	UNKNOWN HYDROCARBON	24.35	8.	J
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

ATTACHMENT MM-7

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: I8153

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

	CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
	51-28-5	2,4-Dinitrophenol	24.	U
	100-02-7	4-Nitrophenol	24.	U
	132-64-9	Dibenzofuran	1.	J
	121-14-2	2,4-Dinitrotoluene	10.	U
	84-66-2	Diethylphthalate	10.	U
	7005-72-3	4-Chlorophenyl-phenylether	10.	U
	86-73-7	Fluorene	2.	J
	100-01-6	4-Nitroaniline	24.	U
	534-52-1	4,6-Dinitro-2-methylphenol	24.	U
	86-30-6	N-Nitrosodiphenylamine (1)	10.	U
	101-55-3	4-Bromophenyl-phenylether	10.	U
	118-74-1	Hexachlorobenzene	10.	U
	87-86-5	Pentachlorophenol	24.	U
	85-01-8	Phenanthrene	1.	J
	120-12-7	Anthracene	10.	U
	86-74-8	Carbazole	10.	U
	84-74-2	Di-n-butylphthalate	10.	U
	206-44-0	Fluoranthene	10.	U
	129-00-0	Pyrene	10.	U
	85-68-7	Butylbenzylphthalate	10.	U
	91-94-1	3,3'-Dichlorobenzidine	10.	U
	56-55-3	Benzo(a)anthracene	10.	U
	218-01-9	Chrysene	10.	U
	117-81-7	bis(2-Ethylhexyl)phthalate	10.	U
	117-84-0	Di-n-octylphthalate	10.	U
	205-99-2	Benzo(b)fluoranthene	10.	U
	207-08-9	Benzo(k)fluoranthene	10.	U
	50-32-8	Benzo(a)pyrene	10.	U
	193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
	53-70-3	Dibenz(a,h)anthracene	10.	U
	191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

ATTACHMENT MM-8

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC1S RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: I8153

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10.	U
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol	10.	U
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	10.	U
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	.7	J
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	24.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	24.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	24.	U
83-32-9	Acenaphthene	.7	J

ATTACHMENT MM-9

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC1S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1030.0 (g/mL) ML Lab File ID: IS131

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 24

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	9.56	8.	J
2. - -	UNKNOWN HYDROCARBON	9.72	6.	J
3. - -	UNKNOWN ALKANE	10.66	10.	J
4. - -	UNKNOWN HYDROCARBON	11.30	10.	J
5. - -	UNKNOWN ALKANE	12.14	9.	J
6. - -	UNKNOWN	12.59	6.	J
7. - -	UNKNOWN HYDROCARBON	13.87	40.	J
8. - -	UNKNOWN HYDROCARBON	14.17	20.	J
9. - -	UNKNOWN HYDROCARBON	14.41	10.	J
10. - -	UNKNOWN	14.55	6.	J
11. - -	UNKNOWN ALKANE	16.21	70.	J
12. - -	UNKNOWN	16.41	10.	J
13. - -	UNKNOWN ALKANE	18.20	10.	J
14. 57-10-3	HEXADECANOIC ACID	19.28	40.	BJ
15. - -	UNKNOWN HYDROCARBON	20.00	10.	J
16. - -	UNKNOWN	21.06	10.	J
17. - -	UNKNOWN	21.44	7.	J
18. - -	UNKNOWN	23.62	10.	J
19. - -	UNKNOWN	24.07	10.	J
20. - -	UNKNOWN	27.05	10.	J
21. - -	UNKNOWN	27.48	9.	J
22. - -	UNKNOWN	28.04	9.	J
23. - -	UNKNOWN ALKANE	15.55	40.	J
24. - -	UNKNOWN ALKANE	17.34	50.	J
25.				
26.				
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ATTACHMENT MM-10

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BEC1S

Lab Name: ICM Contract: A60084

Lab Code: Case No.: SAS No.: SDG No.: BEC1S

Matrix (soil/water): WATER Lab Sample ID: 173322

Level (low/med): LOW Date Received: 09/02/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1720			P
7440-36-0	Antimony	35.1	B		P
7440-38-2	Arsenic	7.1	B		F
7440-39-3	Barium	506			P
7440-41-7	Beryllium	0.20	U		P
7440-43-9	Cadmium	2.0	B		P
7440-70-2	Calcium	38100			P
7440-47-3	Chromium	7.5	B		P
7440-48-4	Cobalt	4.9	U		P
7440-50-8	Copper	14.2	B		P
7439-89-6	Iron	26200		E	P
7439-92-1	Lead	1.3	U		F
7439-95-4	Magnesium	9750		E	P
7439-96-5	Manganese	16300		E	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	15.6	B		P
7440-09-7	Potassium	4400	B		P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.6	U	N	P
7440-23-5	Sodium	34500			P
7440-28-0	Thallium	1.3	U		F
7440-62-2	Vanadium	6.4	B		P
7440-66-6	Zinc	5.9	U		P
	Cyanide				NR

Color Before: LT_BROWN Clarity Before: OPAQUE Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

ILM03.0

ATTACHMENT MM-11

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM Contract: A60084

Lab Code: Case No.: SAS No.: SDG No.: BEC1S

Matrix (soil/water): WATER Lab Sample ID: 173324

Level (low/med): LOW Date Received: 09/02/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	871			P
7440-36-0	Antimony	31.8	U		P
7440-38-2	Arsenic	2.8	U		F
7440-39-3	Barium	248			P
7440-41-7	Beryllium	0.51	B		P
7440-43-9	Cadmium	3.9	B		P
7440-70-2	Calcium	74400			P
7440-47-3	Chromium	6.0	B		P
7440-48-4	Cobalt	13.3	B		P
7440-50-8	Copper	11.9	B		P
7439-89-6	Iron	13600		E	P
7439-92-1	Lead	1.3	U		F
7439-95-4	Magnesium	13400		E	P
7439-96-5	Manganese	8840		E	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	13.0	B		P
7440-09-7	Potassium	6600			P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	3.6	U	N	P
7440-23-5	Sodium	24200			P
7440-28-0	Thallium	1.3	U		F
7440-62-2	Vanadium	4.8	B		P
7440-66-6	Zinc	11.4	B		P
	Cyanide				NR

Color Before: MED_BROWN Clarity Before: OPAQUE Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

ILM03.0

ATTACHMENT MM-12

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5082

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
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ATTACHMENT MM-13

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC-2S RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5092

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-14

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC-2S RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5092

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ATTACHMENT MM-15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5082

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 870.0 (g/mL) ML Lab File ID: I8133

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	29.	U
100-02-7	4-Nitrophenol	29.	U
132-64-9	Dibenzofuran	11.	U
121-14-2	2,4-Dinitrotoluene	11.	U
84-66-2	Diethylphthalate	11.	U
7005-72-3	4-Chlorophenyl-phenylether	11.	U
86-73-7	Fluorene	11.	U
100-01-6	4-Nitroaniline	29.	U
534-52-1	4,6-Dinitro-2-methylphenol	29.	U
86-30-6	N-Nitrosodiphenylamine (1)	11.	U
101-55-3	4-Bromophenyl-phenylether	11.	U
118-74-1	Hexachlorobenzene	11.	U
87-86-5	Pentachlorophenol	29.	U
85-01-8	Phenanthrene	11.	U
120-12-7	Anthracene	11.	U
86-74-8	Carbazole	11.	U
84-74-2	Di-n-butylphthalate	2.	BJ
206-44-0	Fluoranthene	11.	U
129-00-0	Pyrene	11.	U
85-68-7	Butylbenzylphthalate	11.	U
91-94-1	3,3'-Dichlorobenzidine	11.	U
56-55-3	Benzo(a)anthracene	11.	U
218-01-9	Chrysene	11.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	J
117-84-0	Di-n-octylphthalate	11.	U
205-99-2	Benzo(b)fluoranthene	11.	U
207-08-9	Benzo(k)fluoranthene	11.	U
50-32-8	Benzo(a)pyrene	11.	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.	U
53-70-3	Dibenz(a,h)anthracene	11.	U
191-24-2	Benzo(g,h,i)perylene	11.	U

(1) - Cannot be separated from diphenylamine

ATTACHMENT MM-17

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 870.0 (g/mL) ML Lab File ID: I8133

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 18

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	9.34	2.	J
2.	- -	UNKNOWN	11.38	2.	J
3.	- -	UNKNOWN	14.70	5.	J
4.	2719-61-1	METHYLUNDECYL BENZENE	17.19	3.	BJ
5.	- -	UNKNOWN	17.73	7.	BJ
6.	- -	UNKNOWN	18.21	10.	BJ
7.	- -	UNKNOWN	18.54	3.	BJ
8.	57-10-3	HEXADECANOIC ACID	19.07	60.	BJ
9.	- -	UNKNOWN	19.68	7.	J
10.	- -	UNKNOWN	20.58	6.	J
11.	- -	UNKNOWN	20.63	2.	J
12.	57-11-4	OCTADECANOIC ACID	20.88	10.	J
13.	- -	UNKNOWN	21.83	5.	J
14.	- -	UNKNOWN	23.52	10.	BJ
15.	- -	UNKNOWN	24.15	6.	J
16.	- -	UNKNOWN	25.70	30.	BJ
17.	- -	UNKNOWN	27.59	3.	J
18.	- -	UNKNOWN	29.71	2.	BJ
19.					
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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC-2S

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 870.0 (g/mL) ML Lab File ID: I8133

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/20/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11.	U
111-44-4	bis(2-Chloroethyl)ether	11.	U
95-57-8	2-Chlorophenol	11.	U
541-73-1	1,3-Dichlorobenzene	11.	U
106-46-7	1,4-Dichlorobenzene	11.	U
95-50-1	1,2-Dichlorobenzene	11.	U
95-48-7	2-Methylphenol	11.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11.	U
106-44-5	4-Methylphenol	11.	U
621-64-7	N-Nitroso-di-n-propylamine	11.	U
67-72-1	Hexachloroethane	11.	U
98-95-3	Nitrobenzene	11.	U
78-59-1	Isophorone	11.	U
88-75-5	2-Nitrophenol	11.	U
105-67-9	2,4-Dimethylphenol	11.	U
111-91-1	bis(2-Chloroethoxy)methane	11.	U
120-83-2	2,4-Dichlorophenol	11.	U
120-82-1	1,2,4-Trichlorobenzene	11.	U
91-20-3	Naphthalene	11.	U
106-47-8	4-Chloroaniline	11.	U
87-68-3	Hexachlorobutadiene	11.	U
59-50-7	4-Chloro-3-methylphenol	11.	U
91-57-6	2-Methylnaphthalene	11.	U
77-47-4	Hexachlorocyclopentadiene	11.	U
88-06-2	2,4,6-Trichlorophenol	11.	U
95-95-4	2,4,5-Trichlorophenol	29.	U
91-58-7	2-Chloronaphthalene	11.	U
88-74-4	2-Nitroaniline	29.	U
131-11-3	Dimethylphthalate	11.	U
208-96-8	Acenaphthylene	11.	U
606-20-2	2,6-Dinitrotoluene	11.	U
99-09-2	3-Nitroaniline	29.	U
83-32-9	Acenaphthene	11.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5078

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-20

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB1

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5078

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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ATTACHMENT MM-21

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1 MS

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5079

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	4.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	55.	
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	45.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	49.	
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	48.	
108-90-7	Chlorobenzene	49.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-22

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1 MSD

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5080

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/11/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	5.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	57.	
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	47.	
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	51.	
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	51.	
108-90-7	Chlorobenzene	52.	
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

MM-23

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: I8129

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11.	U
111-44-4	bis(2-Chloroethyl)ether	11.	U
95-57-8	2-Chlorophenol	11.	U
541-73-1	1,3-Dichlorobenzene	11.	U
106-46-7	1,4-Dichlorobenzene	11.	U
95-50-1	1,2-Dichlorobenzene	11.	U
95-48-7	2-Methylphenol	11.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11.	U
106-44-5	4-Methylphenol	11.	U
621-64-7	N-Nitroso-di-n-propylamine	11.	U
67-72-1	Hexachloroethane	11.	U
98-95-3	Nitrobenzene	11.	U
78-59-1	Isophorone	11.	U
88-75-5	2-Nitrophenol	11.	U
105-67-9	2,4-Dimethylphenol	11.	U
111-91-1	bis(2-Chloroethoxy)methane	11.	U
120-83-2	2,4-Dichlorophenol	11.	U
120-82-1	1,2,4-Trichlorobenzene	11.	U
91-20-3	Naphthalene	11.	U
106-47-8	4-Chloroaniline	11.	U
87-68-3	Hexachlorobutadiene	11.	U
59-50-7	4-Chloro-3-methylphenol	11.	U
91-57-6	2-Methylnaphthalene	11.	U
77-47-4	Hexachlorocyclopentadiene	11.	U
88-06-2	2,4,6-Trichlorophenol	11.	U
95-95-4	2,4,5-Trichlorophenol	26.	U
91-58-7	2-Chloronaphthalene	11.	U
88-74-4	2-Nitroaniline	26.	U
131-11-3	Dimethylphthalate	11.	U
208-96-8	Acenaphthylene	11.	U
606-20-2	2,6-Dinitrotoluene	11.	U
99-09-2	3-Nitroaniline	26.	U
83-32-9	Acenaphthene	11.	U

ATTACHMENT MM-24

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Name: ICM, Inc. Contract: A60084

Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: I8129

Level: (low/med) LOW Date Received: 09/02/93

Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26.	U
100-02-7	4-Nitrophenol	26.	U
132-64-9	Dibenzofuran	11.	U
121-14-2	2,4-Dinitrotoluene	11.	U
84-66-2	Diethylphthalate	11.	U
7005-72-3	4-Chlorophenyl-phenylether	11.	U
86-73-7	Fluorene	11.	U
100-01-6	4-Nitroaniline	26.	U
534-52-1	4,6-Dinitro-2-methylphenol	26.	U
86-30-6	N-Nitrosodiphenylamine (1)	11.	U
101-55-3	4-Bromophenyl-phenylether	11.	U
118-74-1	Hexachlorobenzene	11.	U
87-86-5	Pentachlorophenol	26.	U
85-01-8	Phenanthrene	11.	U
120-12-7	Anthracene	11.	U
86-74-8	Carbazole	11.	U
84-74-2	Di-n-butylphthalate	.9	BJ
206-44-0	Fluoranthene	11.	U
129-00-0	Pyrene	11.	U
85-68-7	Butylbenzylphthalate	11.	U
91-94-1	3,3'-Dichlorobenzidine	11.	U
56-55-3	Benzo(a)anthracene	11.	U
218-01-9	Chrysene	11.	U
117-81-7	bis(2-Ethylhexyl)phthalate	11.	U
117-84-0	Di-n-octylphthalate	11.	U
205-99-2	Benzo(b)fluoranthene	11.	U
207-08-9	Benzo(k)fluoranthene	11.	U
50-32-8	Benzo(a)pyrene	11.	U
193-39-5	Indeno(1,2,3-cd)pyrene	11.	U
53-70-3	Dibenz(a,h)anthracene	11.	U
191-24-2	Benzo(g,h,i)perylene	11.	U

(1) - Cannot be separated from diphenylamine

ATTACHMENT MM-25

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB1

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 950.0 (g/mL) ML Lab File ID: IS129

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 17

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	11.66	2.	J
2.	- -	UNKNOWN	14.37	2.	J
3.	2719-62-2	PENTYLHEPTYL BENZENE	16.38	2.	J
4.	2719-64-4	PROPYLNONYL BENZENE	16.55	3.	BJ
5.	2400-00-2	ETHYLDECYL BENZENE	16.77	4.	BJ
6.	2719-61-1	METHYLUNDECYL BENZENE	17.18	4.	BJ
7.	- -	UNKNOWN	17.73	5.	BJ
8.	- -	UNKNOWN	18.19	10.	BJ
9.	- -	UNKNOWN	18.52	3.	BJ
10.	57-10-3	HEXADECANOIC ACID	18.95	40.	BJ
11.	- -	UNKNOWN	23.55	9.	BJ
12.	- -	UNKNOWN	24.11	3.	J
13.	- -	UNKNOWN	25.65	3.	BJ
14.	- -	UNKNOWN	27.94	3.	BJ
15.	- -	UNKNOWN	29.45	2.	J
16.	- -	UNKNOWN	29.69	2.	BJ
17.	- -	UNKNOWN	21.88	3.	BJ
18.					
19.					
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30.					

ATTACHMENT MM-26

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: ICM Contract: A60084

Lab Code: Case No.: SAS No.: SDG No.: BEC1S

Matrix (soil/water): WATER Lab Sample ID: 173320

Level (low/med): LOW Date Received: 09/02/93

% Solids: 0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	30700			P
7440-36-0	Antimony	54.7	B		P
7440-38-2	Arsenic	7.8	B		F
7440-39-3	Barium	501			P
7440-41-7	Beryllium	2.6	B		P
7440-43-9	Cadmium	3.1	B		P
7440-70-2	Calcium	255000			P
7440-47-3	Chromium	42.9			P
7440-48-4	Cobalt	54.4			P
7440-50-8	Copper	75.0			P
7439-89-6	Iron	44200		E	P
7439-92-1	Lead	79.6			F
7439-95-4	Magnesium	46200		E	P
7439-96-5	Manganese	12600		E	P
7439-97-6	Mercury	0.10	U		CV
7440-02-0	Nickel	139			P
7440-09-7	Potassium	10300			P
7782-49-2	Selenium	2.0	U		F
7440-22-4	Silver	9.6	B	N	P
7440-23-5	Sodium	386000			P
7440-28-0	Thallium	1.3	U		F
7440-62-2	Vanadium	50.9			P
7440-66-6	Zinc	221			P
	Cyanide				NR

Color Before: BROWN_RED Clarity Before: OPAQUE Texture:

Color After: YELLOW Clarity After: CLEAR Artifacts:

Comments:

FORM I - IN

ILM03.0

ATTACHMENT MM-27

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5095

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	2.	J
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-28

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB5

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5095

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 8

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	78-78-4	Methyl Butane	13.45	20.	J
2.	107-83-5	Methyl Pentane	17.94	5.	J
3.	- -	UNKNOWN HYDROCARBON	18.79	7.	J
4.	1759-58-6	Dimethyl Cyclopentane	21.46	7.	J
5.	565-59-3	Dimethyl Pentane	22.62	10.	J
6.	- -	UNKNOWN HYDROCARBON	23.86	6.	J
7.	- -	UNKNOWN HYDROCARBON	25.14	40.	J
8.	6004-38-2	Octahydro Methanoindene	29.24	6.	J
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10.					
11.					
12.					
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ATTACHMENT MM-29

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: I8130

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	33.	
111-44-4	bis(2-Chloroethyl)ether	10.	U
95-57-8	2-Chlorophenol	10.	U
541-73-1	1,3-Dichlorobenzene	10.	U
106-46-7	1,4-Dichlorobenzene	10.	U
95-50-1	1,2-Dichlorobenzene	10.	U
95-48-7	2-Methylphenol	10.	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10.	U
106-44-5	4-Methylphenol	16.	
621-64-7	N-Nitroso-di-n-propylamine	10.	U
67-72-1	Hexachloroethane	10.	U
98-95-3	Nitrobenzene	10.	U
78-59-1	Isophorone	10.	U
88-75-5	2-Nitrophenol	10.	U
105-67-9	2,4-Dimethylphenol	10.	U
111-91-1	bis(2-Chloroethoxy)methane	10.	U
120-83-2	2,4-Dichlorophenol	10.	U
120-82-1	1,2,4-Trichlorobenzene	10.	U
91-20-3	Naphthalene	.7	J
106-47-8	4-Chloroaniline	10.	U
87-68-3	Hexachlorobutadiene	10.	U
59-50-7	4-Chloro-3-methylphenol	10.	U
91-57-6	2-Methylnaphthalene	1.0	J
77-47-4	Hexachlorocyclopentadiene	10.	U
88-06-2	2,4,6-Trichlorophenol	10.	U
95-95-4	2,4,5-Trichlorophenol	24.	U
91-58-7	2-Chloronaphthalene	10.	U
88-74-4	2-Nitroaniline	24.	U
131-11-3	Dimethylphthalate	10.	U
208-96-8	Acenaphthylene	10.	U
606-20-2	2,6-Dinitrotoluene	10.	U
99-09-2	3-Nitroaniline	24.	U
83-32-9	Acenaphthene	10.	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5	RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5099

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10.	U
74-83-9	Bromomethane	10.	U
75-01-4	Vinyl Chloride	10.	U
75-00-3	Chloroethane	10.	U
75-09-2	Methylene Chloride	10.	U
67-64-1	Acetone	10.	U
75-15-0	Carbon Disulfide	10.	U
75-35-4	1,1-Dichloroethene	10.	U
75-34-3	1,1-Dichloroethane	10.	U
540-59-0	1,2-Dichloroethene (total)	10.	U
67-66-3	Chloroform	10.	U
107-06-2	1,2-Dichloroethane	10.	U
78-93-3	2-Butanone	10.	U
71-55-6	1,1,1-Trichloroethane	10.	U
56-23-5	Carbon Tetrachloride	10.	U
75-27-4	Bromodichloromethane	10.	U
78-87-5	1,2-Dichloropropane	10.	U
10061-01-5	cis-1,3-Dichloropropene	10.	U
79-01-6	Trichloroethene	10.	U
124-48-1	Dibromochloromethane	10.	U
79-00-5	1,1,2-Trichloroethane	10.	U
71-43-2	Benzene	10.	U
10061-02-6	trans-1,3-Dichloropropene	10.	U
75-25-2	Bromoform	10.	U
108-10-1	4-Methyl-2-Pentanone	10.	U
591-78-6	2-Hexanone	10.	U
127-18-4	Tetrachloroethene	10.	U
79-34-5	1,1,2,2-Tetrachloroethane	10.	U
108-88-3	Toluene	10.	U
108-90-7	Chlorobenzene	10.	U
100-41-4	Ethylbenzene	10.	U
100-42-5	Styrene	10.	U
1330-20-7	Xylene (total)	10.	U

ATTACHMENT MM-31

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB5	RE

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: C5099

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: not dec._____ Date Analyzed: 09/12/93

GC Column: SP1000 ID: 2.00 (mm) Dilution Factor: 1.0

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

Number TICs found: 10

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	78-78-4	Methyl Butane	13.57	20.	J
2.	107-83-5	Methyl Pentane	17.98	6.	J
3.	- -	UNKNOWN HYDROCARBON	18.79	8.	J
4.	- -	UNKNOWN HYDROCARBON	19.14	5.	J
5.	1759-58-6	Dimethyl Cyclopentane	21.46	7.	J
6.	108-08-7	Dimethyl Pentane	22.16	6.	J
7.	565-59-3	Dimethyl Pentane	22.62	20.	J
8.	- -	UNKNOWN HYDROCARBON	23.86	6.	J
9.	- -	UNKNOWN HYDROCARBON	25.14	40.	J
10.	19026-94-9	Octahydro Methanoindene	29.24	6.	J
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
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30.					

FORM I VOA-TIC 3/90

ATTACHMENT MM-32

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: I8130

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	24.	U
100-02-7	4-Nitrophenol	24.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2,4-Dinitrotoluene	10.	U
84-66-2	Diethylphthalate	10.	U
7005-72-3	4-Chlorophenyl-phenylether	10.	U
86-73-7	Fluorene	10.	U
100-01-6	4-Nitroaniline	24.	U
534-52-1	4,6-Dinitro-2-methylphenol	24.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether	10.	U
118-74-1	Hexachlorobenzene	10.	U
87-86-5	Pentachlorophenol	24.	U
85-01-8	Phenanthrene	.9	J
120-12-7	Anthracene	10.	U
86-74-8	Carbazole	10.	U
84-74-2	Di-n-butylphthalate	.7	BJ
206-44-0	Fluoranthene	10.	U
129-00-0	Pyrene	1.	J
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3,3'-Dichlorobenzidine	10.	U
56-55-3	Benzo(a)anthracene	10.	U
218-01-9	Chrysene	10.	U
117-81-7	bis(2-Ethylhexyl)phthalate	2.	J
117-84-0	Di-n-octylphthalate	10.	U
205-99-2	Benzo(b)fluoranthene	1.	J
207-08-9	Benzo(k)fluoranthene	10.	U
50-32-8	Benzo(a)pyrene	10.	U
193-39-5	Indeno(1,2,3-cd)pyrene	10.	U
53-70-3	Dibenz(a,h)anthracene	10.	U
191-24-2	Benzo(g,h,i)perylene	10.	U

(1) - Cannot be separated from diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB5

Lab Name: ICM, Inc. Contract: A60084

Lab Code: ICM Case No.: SAS No.: SDG No.: BEC1S

Matrix: (soil/water) WATER Lab Sample ID:

Sample wt/vol: 1040.0 (g/mL) ML Lab File ID: I8130

Level: (low/med) LOW Date Received: 09/02/93

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 09/07/93

Concentrated Extract Volume: 1000.0 (uL) Date Analyzed: 09/19/93

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ____

Number TICs found: 25

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	.92	20.	J
2.	- -	UNKNOWN	1.13	40.	J
3.	79-46-9	NITRO PROPANE	2.00	200.	J
4.	- -	UNKNOWN	2.20	40.	J
5.	57-14-7	DIMETHYL HYDRAZINE	4.42	200.	J
6.	- -	UNKNOWN	4.82	90.	J
7.	527-53-7	TETRAMETHYL BENZENE	7.90	10.	J
8.	- -	UNKNOWN	10.83	20.	J
9.	- -	UNKNOWN	11.42	100.	J
10.	100-83-4	HYDROXY BENZALDEHYDE	12.22	10.	J
11.	- -	UNKNOWN	13.62	20.	J
12.	- -	UNKNOWN	14.39	9.	J
13.	- -	UNKNOWN	14.45	10.	J
14.	- -	UNKNOWN	16.94	10.	J
15.	- -	UNKNOWN	19.13	70.	J
16.	10544-50-0	MOLECULAR SULFUR	19.70	600.	J
17.	506-12-7	HEPTADECANOIC ACID	19.93	4.	J
18.	- -	UNKNOWN	20.91	20.	J
19.	- -	UNKNOWN	22.36	10.	J
20.	- -	UNKNOWN	22.44	6.	J
21.	112-85-6	DOCASANOIC ACID	24.15	7.	J
22.	- -	UNKNOWN	27.66	20.	J
23.	- -	UNKNOWN	27.96	100.	J
24.	- -	UNKNOWN	28.22	10.	J
25.	- -	UNKNOWN	28.65	7.	J
26.					
27.					
28.					
29.					
30.					

ATTACHMENT MM-34

ATTACHMENT NN

ERICA WALLACE
BEMQA-EMS

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

NOV 19 1993

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 11/19/93
Joseph Sanguiliano 11/19/93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab 11.19.93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Validation of water samples collected from the **Paperboard Specialties Inc.** for CLP deliverables; Analyses done by Industrial Corrosion Management.

Field ID#	Lab. ID#	Sample Date	Matrix
PS9193MWB1	173320	09/01/93	WATER
PS9193MWB5	173321	09/01/93	WATER
PS9193BEC1S	173322	09/01/93	WATER
PS9193MWDUP	173323	09/01/93	WATER
PS9193BEC2S	173324	09/01/93	WATER
PS9193FB	173325	09/01/93	WATER
PS9193TB	173326	09/01/93	WATER

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for organics and inorganics according to the latest Statements of Work, SOW OLM01.8 and SOW ILM02.1. The data are acceptable with the exception of the QC deficiencies noted below. Please refer to the Target and Non-target Compound Summary List for additional information. A detailed data validation report is available for your review.

ATTACHMENT NN-1

VOLATILES:

The data are acceptable as presented.

SEMIVOLATILES:

The data are acceptable as presented.

PESTICIDES:

The analysis was not requested.

INORGANICS:

Silver results in all samples are qualified because the pre-digestion spike analysis was 74.4% which did not meet the QC limits (75-125%).

Antimony and Silver results are estimated and biased high because the CRDL standard analysis results of these analytes (125.8% and 122% respectively) exceeded the quality control limits (80-120%).

Iron, Magnesium and Manganese results are qualified because the serial dilution analysis results for these analytes (12.7%, 10.2% and 11.8% respectively) exceeded the quality control limit (10%).

Cyanide analysis was not performed.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

cc: William Lowry, BEMQA
~~S. Vijayasundaram, BSM~~

ATTACHMENT NN-2

ATTACHMENT OO

NET® NATIONAL ENVIRONMENTAL TESTING, INC.

Thorofare Division
100 Grove Road
P.O. Box 248
Thorofare, NJ 08086
Tel: (609) 848-3939
Fax: (609) 848-9195

OCT 04 1993

FOR:

New Jersey Department of Environmental Protection

Division of Hazardous Site Mitigation
CN-413/ 25 Arctic Parkway
Trenton, NJ 08638

Attention: Erica Wallace
Project: Paperboard Specialties

Report #: 93.02538
Date: October 1, 1993

MWB-5
Selected organics

NET ATLANTIC, INC.
Thorofare Division

Approved and released by:

Robert Moorfield
Laboratory Manager

Review and approval of technical data by:

John Visicaro
QA Coordinator

NJ Certification # 08153

ATTACHMENT QO-1

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division
Report of Results

Client: NJ DEPT OF ENV. PROTECTION
Report NO: 93.02538
Sample ID: PS9193MWB5
NET-Mid ID: 121176
% Moisture: N/A

Selected Organics by GC AQ

Methanol	AQ 1.0	U	mg/L
t-Butyl alcohol	AQ 1.0	U	mg/L
Isopropyl ether	AQ 1.0	U	mg/L
Ethanol	AQ 1.0	U	mg/L
Methyl tert-butyl alcohol	AQ 1.0	U	mg/L

ATTACHMENT 00-2

NET THOROFARE, GC REPORT

Sample Name: 02538-121176

9/15/93 , 5 UL INJ. , J.MCCOLLUM

Injected on Wed Sep 15, 1993 9:31:46 am

Result File: /DATA/LOOP/RESULT/G341005.RES

Instrument: HP 5890 (HPG)
Column: SP-1000
Detector: FID
Carrier Flow: 30 cc/min
Temperature Program
50C TO 200C @10C/min

Pk #	RT	Area	Code	MG/L	Name

298

Method: /DATA/LOOP/METHOD/CALG340.MTH
Format File: /DATA/LOOP/FORMAT/GALC.FMT

ATTACHMENT 00-3

NET THOROFARE, GC/602 REPORT

mple Name: 02538-121176

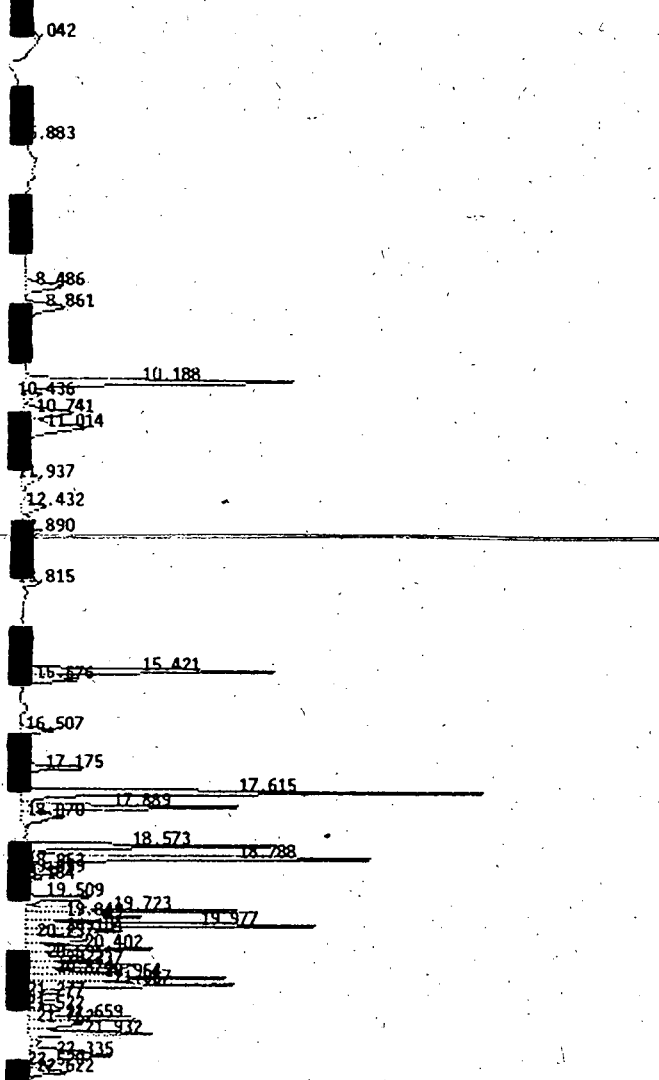
13/93 , 5 ML PURGE , J.MCCOLLUM

njected on Mon Sep 13, 1993 12:53:06 pm

sult File: /DATA/LOOP/RESULT/F339005.RES

Instrument:HP5890 (HPF)
Column: RTx 502.2
Detector: PID
Carrier Flow: 10 cc/min
Temperature Program
50C to 145C @6C/min
145C to 220C @20C/min
hold for 5 min

Pk #	RT	Area	Code	UG/L	Name
5	10.19	26023	VV	99.85	% TFT (SS)
10	12.43	3326	VV	1.62	TOLUENE
14	15.58	5474	VV	3.35	P+M-XYLENE
15	16.51	3228	VV	2.08	O-XYLENE
17	17.62	35803	PV	97.89	% BFB (SS)
25	19.51	5445	VV	3.06	1,4-DICHLOROBENZENE
28	19.98	21261	VV	12.64	1,2-DICHLOROBENZENE



ethod: /DATA/LOOP/METHOD/CALF332.MTH
ormat File: /DATA/LOOP/FORMAT/F602.FMT

ATTACHMENT 00-4

C00023

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division

REPORT OF ANALYSIS

Monitor Well Data

Client: NJ DEPT OF ENV. PROTECTION
Job No: 93.02538
Sample No: 121176
Client Sample ID: PS9193MWB5

Parameter	Results	Units
Dissolved Oxygen	3.5	mg/L
pH	6.22	pH units
Solids, dissolved (TDS)	505	mg/L

ATTACHMENT 00-5

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division

REPORT OF ANALYSIS

Client: NJ DEPT OF ENV. PROTECTION
Job No: 93.02538
Sample No: 121175
Client Sample ID: PS9193BEC2-S

Parameter	Results	Units
Dissolved Oxygen	6.4	mg/L
pH	6.34	pH units
Solids, dissolved (TDS)	430	mg/L

ATTACHMENT 00-6

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division

REPORT OF ANALYSIS

Client: NJ DEPT OF ENV. PROTECTION
Job No: 93.02538
Sample No: 121174
Client Sample ID: PS9193BEC1-S

Parameter	Results	Units
Dissolved Oxygen	4.5	mg/L
pH	6.43	pH units
Solids, dissolved (TDS)	290	mg/L

ATTACHMENT 00-7

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division

REPORT OF ANALYSIS

Client: NJ DEPT OF ENV. PROTECTION
Job No: 93.02538
Sample No: 121173
Client Sample ID: PS9193MWB-1

Parameter	Results	Units
Dissolved Oxygen	7.3	mg/L
pH	6.58	pH units
Solids, dissolved (TDS)	2535	mg/L

ATTACHMENT 00-8

NATIONAL ENVIRONMENTAL TESTING, INC.
Thorofare Division

REPORT OF ANALYSIS

Client: NJ DEPT OF ENV. PROTECTION
Job No: 93.02538
Sample No: 121172
Client Sample ID: PS9193MWDUP

Parameter	Results	Units
Dissolved Oxygen	7.3	mg/L
pH	6.59	pH units
Solids, dissolved (TDS)	2860	mg/L

ATTACHMENT 00-9

ATTACHMENT PP

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

DEC 0 9 1993

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 12/9/93
Joseph Sanguiliano 12-8-93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab A.W. 12-8-93
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Review of samples collected from the **Paperboard Specialties Inc.** for Regulatory deliverables. Analyses done by NET- ATLANTIC (Thorofare).

Field ID#	Lab. ID#	Sample Date	Matrix
PS9193MWDUP	121172	09/01/93	MONITOWELL
PS9193MWB-1	121173	09/01/93	MONITOWELL
PS9193BEC1-S	121174	09/01/93	MONITOWELL
PS9193BEC2-S	121175	09/01/93	MONITOWELL
PS9193MWB5	121176	09/01/93	MONITOWELL

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for Dissolved Oxygen, pH and Total Dissolved Solids by USEPA Methods 360.1, 151.1 and 160.1 respectively.

All samples were analyzed within the holding times of the methods used. Data are acceptable as presented.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

cc: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT PP-1

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Jeanne M. Fox
Acting Commissioner

Anthony J. Farro
Director

JAN 05 1994

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief 1/6/94
Joseph Sanguiliano 1/6/94
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Atiya Wahab A.W. 1/5/94
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Review of samples collected from the **Paperboard Specialties Inc.** for Regulatory deliverables. Analyses done by NET- ATLANTIC (Thorofare).

Field ID#	**Lab. ID#**	**Sample Date**	**Matrix**
PS9193MWB5	121176	09/01/93	WATER
PS9193FB	121171	09/01/93	WATER
PS9193TB	121177	09/01/93	WATER

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the above mentioned samples for Methanol, Ethanol, IPE, MTBE and TBA by USEPA Method 602 and ASTM Method D3695-82.

All sample results were "non-detected". Data are acceptable as presented based on the following criteria:

1. All samples were analyzed within the holding times of the methods used.

2. Initial and continuing calibration criteria were met.

3. QC blank and matrix spike criteria were met.

If you have any questions concerning this review, please do not hesitate to contact this office at 3-0752.

cc: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT QQ

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF PUBLICLY FUNDED SITE REMEDIATION

BUREAU OF ENVIRONMENTAL MEASUREMENTS AND QUALITY ASSURANCE

ENVIRONMENTAL MEASUREMENTS SECTION

SAMPLING EVENT PACKAGE

PAPERBOARD SPECIALTIES - PATERSON
AREA-A SAMPLING FOR GW AND SOIL
NOVEMBER 9-10, 1993

Author

Section Chief

ATTACHMENT QQ-1

State of New Jersey
Department of Environmental Protection and Energy
Division of Publicly Funded Site Remediation
CN 413
Trenton, NJ 08625-0413
Tel. # 609-984-2902
Fax. # 609-633-2360

Scott A. Weiner
Commissioner

Anthony J. Farro
Director

JAN 20 1994

M E M O R A N D U M

TO: TRISH CONTI, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: CHAD VAN SCIVER, HSMS I CVS
Bureau of Environmental Measurements and Quality Assurance

FROM: JOHN EVENSON, HSMS III JE 1/20/94
Environmental Measurements Section

SUBJECT: PAPERBOARD SPECIALTIES - PATERSON
Soil Boring and Well Point Sampling Episode - Nov. 9-10, 1993
BEMQA Log #2085

Purpose

Pursuant to your request, the Environmental Measurements Section has completed a ground water and sub-surface soil investigation at the above-mentioned site. Sampling was performed in accordance with the Phase II scope of work for the purpose of delineating the soil contamination in the Area A parking lot.

Introduction

On November 9, Environmental Measurements Section (EMS) personnel measured out three sample locations within the Area A parking lot; one located upgradient, one downgradient and one sidegradient of the suspected contamination. At-depth soil boring samples were collected from the three locations and analyzed by NJDEPE Bureau of Organic and Analytical Services (BOAS) and the Bureau of Radiation and Inorganic Analytical Services (BRIAS) for Target Compound List (TCL) Volatile Organics (method 624), TCL Base neutral/Acid extractables (method 8270), PCB's (method 8080) and Target Analyte List (TAL) Metals, respectively. Soil samples were also analyzed by the NJDEPE Mobile Laboratory for the Total Volatile Organics fraction by heated headspace capillary column gas chromatography with flame ionization and TPHC (Total Petroleum Hydrocarbon) by GC/MS. A total of five borings were made during the two day sampling event. In addition, two well point piezometers were installed, one upgradient and one downgradient of the suspected source areas for ground water characterization. Samples were collected from the well points on November 10 and analyzed by the Mobile laboratory for the Total Volatiles fraction and TPHC. Ensys Enzyme Immunoassay Petro kits for

soil and water were employed to aid in the delineation of the soil and characterization of the suspected ground water contamination. For complete sample information, please refer to Table I.

Personnel on site:

John Evenson, EMS	11/9-11/10
Erica Wallace, EMS	11/10
Rich Gunoskey, EMS	11/9-11/10
John Caruso, EMS	11/9-11/10
Trish Conti, BEERA	11/9-11/10
S. Vijay, BSM	11/9-11/10
Daryle Clark, BGWPA	11/9-11/10
Leslie Reid-Green, OSSH	11/10
Geological Survey	11/10

Methodology

Prior to conducting soil borings on November 10, a Ground Penetrating Radar survey was conducted inside the parking area by the NJGS to determine the location of four underground storage tanks; the four tanks were considered to be the main source of contamination. The survey revealed that the tanks had been removed from the parking area. As a result, borings PA-7 and PA-8 were moved to the middle of the parking lot in an area where the tanks were expected to be located.

A tripod mounted, motorized cathead unit (Acker) containing a one-hundred forty pound slide hammer was employed to advance two (2) inch diameter split spoons into the overburden at two (2) foot increments to ground water (approximately 8-10 ft.), according to location. Once retreived, the spoons were opened and the collected contents were scanned with a Photoionization detector (HNu^R PI-101) for the presence of Volatile organic vapors. Samples for TCL Volatile organics were collected by directly transferring soil into sample containers utilizing dedicated stainless steel spatulas/trowels. All other samples were collected by placing the soil in a stainless steel pan, mixing its contents, and then transferring samples into proper containers using dedicated spatulas/trowels. For additional information, refer to the attached soil logs.

For ground water collection, the Acker was used to advance the well points approximately two (2) feet into the ground water interface. The well points were five (5) feet in length and constructed of continuous wrapped stainless steel mesh (0.010 " slot size) over perforated galvanized pipe, with a carbon steel drive point. The riser pipe casing was constructed of galvanized steel; at no time did the casing contact the ground water. Ground water samples were collected using a flow controlled peristaltic pump with Teflon^R and Silicon tubing.

Ensys Enzyme Immunoassay field analysis kits for petroleum hydrocarbons were employed to assist in the delineation of suspected contaminated soils and ground water characterization. All tests were performed in accordance with procedures outlined by the manufacturer.

These test kits are the only petroleum hydrocarbon immunoassay test listed as an approved method under SW-846 (Method 4030).

Discussion

Based upon Mobile Laboratory results, only the downgradient soil sample (PSDG) was reported to have results above the minimum quantifiable amount for TPHC's. The petroleum product from this sample appears identical to sample PA-2, a sample that was collected in the same general area of Parking Area A during the September 27 - October 6 sampling episode, but differs significantly from samples collected from soil borings in and around the main building and from product sampled from monitor wells and the underground storage tank. The downgradient sample is characterized as having a molecular weight range consistent with a kerosene or diesel fuel (C11 to C21) with the major constituent of the oil being a C15 compound (Trimethyldecane), with little or no detectable gasoline or BTEX fraction. For further information regarding sample analysis results, please refer to the attached Mobile Laboratory report.

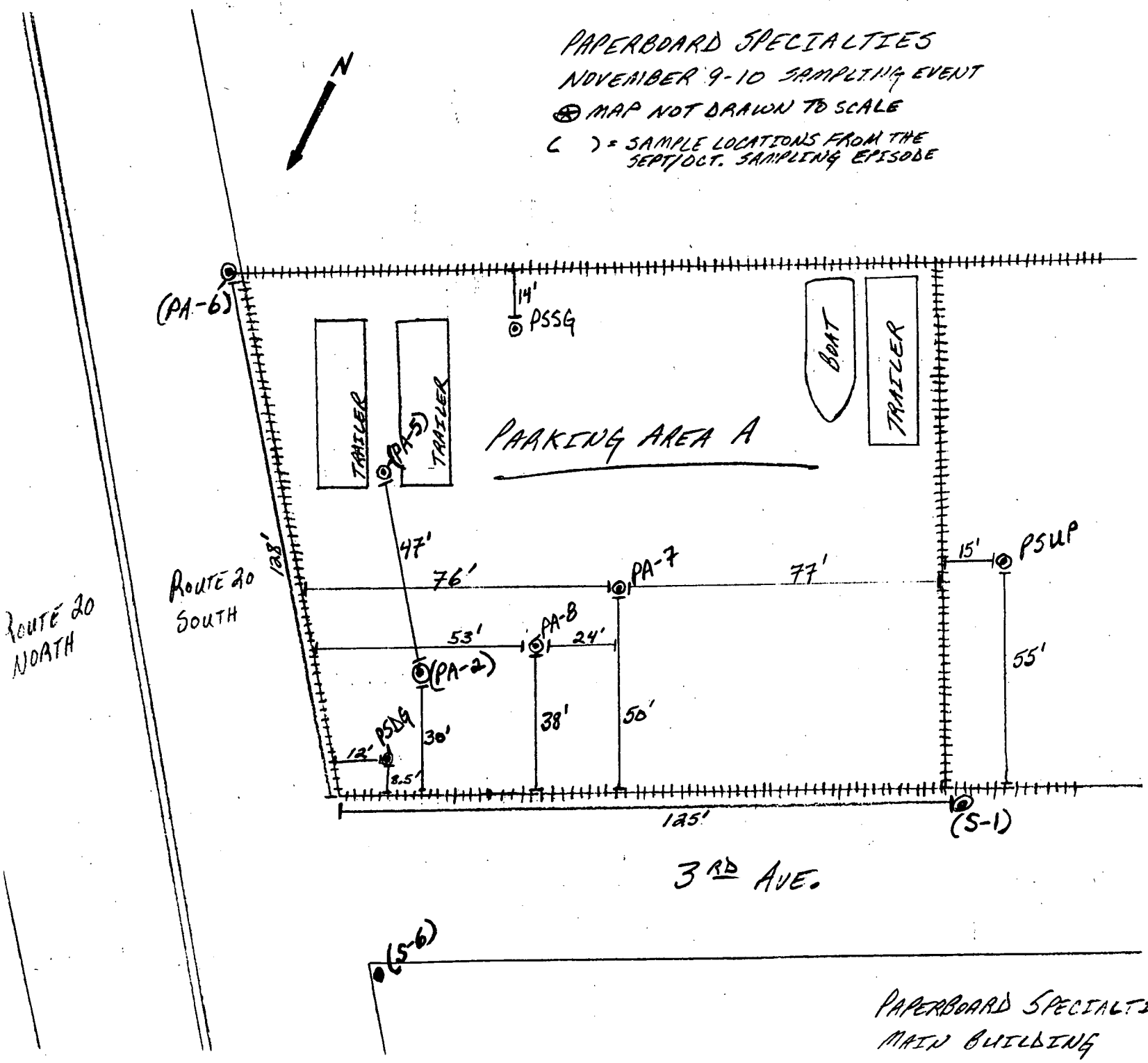
Based upon Mobile Laboratory results, Ensys Immunoassay tests, visual inspection and PID field screening, the contamination is localized in the east end of the parking lot extending out towards Route 20. Samples PA-2, PA-5 and PSDG are heavily contaminated in both soil and ground water. Boring PA-6 results did not indicate soil contamination, however, ground water was contaminated by the petroleum product. See E. Wallace report for results of PA-2, PA-5 and PA-6. Soil boring samples collected from PA-8, PA-7, PSSG and PSUP were not contaminated. Ground water samples collected at PSUP were also considered to be clean. For the excavation, it is recommended that the contaminated soil from the northeast end of the parking lot be removed down to the water table between boring PA-8 and the Route 20 fence line and extend to the southeast between boring location PSSG and PA-6. Borings PA-8 and PSSG are the closest sample locations to the Route 20 fence line considered free of contamination. See attached map for sample locations. The use the of Ensys Immunoassay petroleum kits may be employed to assist in the delineation of the soils during the excavation. Any questions may be addressed to the writer at 4-1693.

JE
w/attachments

c: William F. Lowry, BEMQA
Vijay, BSM
Daryle Clark, BGWPA
Erica Wallace, EMS
Rich Gunoskey, EMS
John Caruso, EMS

ATTACHMENT QQ-4

PAPERBOARD SPECIALTIES
NOVEMBER 9-10 SAMPLING EVENT
⊗ MAP NOT DRAWN TO SCALE
( ) = SAMPLE LOCATIONS FROM THE SEPT/OCT. SAMPLING EPISODE



ATTACHMENT QQ-5

PAPERBOARD SPECIALTIES
MAIN BUILDING

TABLE 1
PAPERBOARD SPECIALTIES, INC.
SOIL BORING/WELL POINT SAMPLING
EPISODE - NOVEMBER 9 - 10, 1993

SAMPLE LOCATION	SAMPLE NUMBER	SAMPLE DEPTH	SAMPLE TIME	PARAMETERS	IMMUNOASSAY - SOIL 1000ppm	IMMUNOASSAY - SOIL 10,000ppm	IMMUNOASSAY - WATER 165ppb	IMMUNOASSAY - WATER 1,000ppb
UPGRADIENT SOIL	PSUP1109938-10	10-12 ft	1030	IMMUNOASSAY TEST ONLY.	(-)	(-)	(-)	(-)
UPGRADIENT SOIL	PSUP11099310-12	8-10 ft	1030	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS.	N/A	N/A	N/A	N/A
UPGRADIENT WATER	PSUP111093W-1	N/A	1110	TPHC (GC/MS),TOTAL VOLATILES	N/A	N/A	(-)	(-)
DOWNGRADIENT SOIL	PSDG1109936-8	6-8 ft	1545	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS, TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
DOWNGRAD. WATER	PSDG111093W-2	N/A	0900	TPHC (GC/MS),TOTAL VOLATILES	N/A	N/A	(+)	(+)
SIDEGRADIENT SOIL	PSSG1109938-10	8-10 ft	1300	TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
PARKING 7-A SOIL	PS111093PA-7	8-10 ft	1430	VOA'S (624), BN/AE (8270), PCB (8080), TAL METALS, TPHC (GC/MS),TOTAL VOLATILES	(-)	(-)	N/A	N/A
PARKING 8-A SOIL	PS111093PA-8	8-10 ft	1515	IMMUNOASSAY TEST ONLY.	(-)	(-)	N/A	N/A
FIELD BLANK	PS110993FB	N/A	1610	VOA'S (624).	N/A	N/A	N/A	N/A
TRIP BLANK	TB	N/A	11/9-11/10	TOTAL VOLATILES.	N/A	N/A	N/A	N/A

TPHC (GC/MS) AND THE TOTAL VOLATILE ORGANICS FRACTION ANALYSIS WAS PERFORMED BY THE MOBILE LABORATORY.
VOLATILE ORGANICS (624), BN/AE (8270), PCB (8080), TAL METALS ANALYSIS WAS PERFORMED BY BOAS/BRIAS.
(-): Result is less than targeted concentration.
(+): Result is greater than or equal to targeted concentration.

ATTACHMENT 99-6

NJDEPE/ENVIRONMENTAL MEASUREMENTS SECTION

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
PROJECT NO.: ___
BORING NO.: ___
Location: PSLOP - UPGRADIENT
Coordinates: ___
Drilling Method Used: ACKER
Contractor: ___
Date: 11/09/93
Field Scientist/Engineer: J. EVENSON
Water Table Depth: 11-12' Approx
Hammer Weight: 140 lb.
Notes: WELL POINT 1 WAS INSTALLED AT THIS LOCATION
Organic Vapor Instrument Used: HNu PI-101

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
		7	18"	ND	Dk. black fill material → 0-1'	14"	No petroleum odor	
		7			Brown sandy soil → 14-18"			
1		6						
		6						
2		12		N/A	No Recovery		N/A	
		8						
3		6						
		4						
4		5		N/A	No Recovery		N/A	
		7						
5		4						
		3						
6		3		N/A	No Recovery		N/A	
		4						
7		7						
		7						
8		11	6"	ND	Brown/red sand loam		No Petroleum odor	BOAS/BRGAS: VOA's, BNA's, PCB TAL METALS
		24						
9		44						
		48						
10		33	1"	ND	Same as above		No Petroleum odor	Immunoassay ONLY
		19						
11		9						
		15						
12								
13								
14								
15								

ATTACHMENT QQ-7

NJDEPE/ENVIRONMENTAL MEASUREMENTS SECTION

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
Location: PSSG - SIDE GRADIENT
Contractor: ____
Field Scientist/Engineer: J. EVERSON
Notes: ____

PROJECT NO.: ____
Coordinates: ____
Date: 11/09/93
Water Table Depth: ____
Organic Vapor Instrument Used: HNu-PI 101

BORING NO.: ____
Drilling Method Used: ACKER
Hammer Weight: 140lb

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
		4 / 7	10"	ND	Black fill material - feels like cork. Contained some glass		No petroleum odor	
1		6 / 3		↓				
2		6 / 4	4"	ND	Same as above		No petroleum odor	
3		2 / 2		↓				
4		6 / 3	10"	ND	Same as above w/ some coarse sands		No petroleum odor	
5		3 / 5		↓				
6		8 / 8	6"	ND	Brown coarse sand		No petroleum odor	
7		9 / 19		↓				
8		34 / 22	14"	ND	Brown/Red sand		No petroleum odor	Immuno assay on
9		22 / 36		↓				
10								
11								
12								
13								
14								
15								

ATTACHMENT QQ-8

NJDEPE/ENVIRONMENTAL MEASUREMENTS SECTION

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
Location: PSDG - DOWN GRADIENT
Contractor: ____
Field Scientist/Engineer: J. ELVERSON
Notes: WELL POINT 2 WAS INSTALLED AT THIS LOCATION

PROJECT NO.: ____
Coordinates: ____
Date: 11/09/93
Water Table Depth: 8' APPROX.
Organic Vapor Instrument Used: HNU-PI-101

BORING NO.: ____
Drilling Method Used: ACKER
Hammer Weight: 140 lb.

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
	X	3, 4	5"	ND	DK. brown, coarse sand		No petroleum odor	
1	X	4, 3		↓				
2	X	4, 5	4"	ND	Same as above		No petroleum odor	
3	X	2, 2		↓				
4	X	3, 2		N/A	NO RECOVERY			
5	X	1, 2		↓				
6	X	5, 5	12"	5-15 ppm	BROWN sand; some gray & red coloring		Petroleum odor present	PSDG 11099 6-8
7	X	12, 22					Analysis for BOAS/BRIAS, Immunassay + Mobile Laboratory	
8								
9								
10								
11								
12								
13								
14								
15								

ATTACHMENT QQ-9

NJDEPE/ENVIRONMENTAL MEASUREMENTS SECTION

BORING LOG

PROJECT: PAPERBOARD SPECIALTIES
PROJECT NO.: ____
BORING NO.: ____
Location: PA-7
Coordinates: ____
Drilling Method Used: ACKER
Contractor: ____
Date: 11/10/93
Field Scientist/Engineer: E. WALLACE
Water Table Depth: 8' approx.
Hammer Weight: 140 lb.
Notes: ____
Organic Vapor Instrument Used: HNu - PI-101

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
	X	11 / 10	14"	ND	Rocky, dk. brown/black coarse sand with silt no petroleum odor (fill material)?			
1	X	6 / 5		↓				
2	X	4 / 5	1-2"	ND	Dk. brown/black coarse sand, rocky No petroleum odor (little recovery) (fill material)?			
3	X	2 / 2		↓				
4	X	1 / 1	5"	ND	Same as above No petroleum odor			
5	X	2 / 5		↓				
6	X	10 / 24	10"	ND	Med. brown coarse sand No petroleum odor			
7	X	16 / 13		↓				
8	X	7 / 15	18"	ND	Same as above, but rocky and wet No petroleum odor		BOAS: VOA's, BNA's PCB, TAL METALS Immunoassay & Mobile Laboratory	PS111093
9	X	13 / 25		↓				
10								
11								
12								
13								
14								
15								

ATTACHMENT QQ-10

NJDEPE/ENVIRONMENTAL MEASUREMENTS SECTION

BORING LOG

PROJECT: Paperboard Spec.
Location: PA-8
Contractor:
Field Scientist/Engineer: E Wallace
Notes:

PROJECT NO.:
Coordinates:
Date: 11/10/93
Water Table Depth: 8' approx
Organic Vapor Instrument Used: HNU

BORING NO.:
Drilling Method Used: Acker
Hammer Weight: 140 lb.

Depth (feet)	Sample Interval	Blows per 6 inches	Adv. / Recov.	Org. vap. (ppm)	Sample Description	Strata Change	Comments	Sample No.
		9 / 9	20"	ND	Bottom 6" whitish clay silt.			
1		5 / 3		↓	Black - brown coarse sandy silt small pebbles. no petrol odor.			
2		4 / 2	6"	ND	white sandy silt mixed w/ dk. brown coarse sand no petrol. odor			
3		1 / 1		↓				
4		3 / 2	20"	ND	Bottom 5" dk. brown/blk. silt. Top is same as above, but w/ glass mixed in. No petrol. odor throughout.			
5		1 / 2		↓				
6		4 / 16	6"	ND	Bottom 2" coarse dk. brown sand. Above is ~~sandy~~ sandy clay. rocky. No petrol odor.		Mobile Lab VO +TPHC	A511093PA-8
7		12 / 11		↓				
8		3 / 1	3"	ND	Rocky dk. brown-red sandy clay. No petrol odor		IA	PA-8
9		15 / 24		↓				
10								
11								
12								
13								
14								
15								

ATTACHMENT QQ-11

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

FINAL REPORT

Paperboard Specialties, Paterson

November 18, 1993

1.0 INTRODUCTION

NOTE: This report is an addendum to the **Paperboard Specialties** report dated October 12, 1993, and includes analytical results for samples obtained during a subsequent sampling event.

Groundwater and soil samples were collected from the Paperboard Specialties site, in Paterson, NJ.

The sampling occurred during the period:
From 11/9/93 To 11/12/93 '93.

The parameters requested for this analysis included:

Total Petroleum Hydrocarbons (TPHC) by GC/MS, including characterization; and, Total Hydrocarbons (THC) Volatile Fraction by Heated Headspace Capillary Column Gas Chromatography With Flame Ionization Detector.

Results of both of these analyses are shown in the two Analytical Results Reports, attached.

2.0 PROCEDURES

2.1 FIELD SAMPLING PROCEDURES

2.11 Samples For Semi Volatile Extraction And GC/MS Analysis.

Soil samples were collected in glass jars with screw cap lids. Sampling was conducted in accordance with procedures specified in the NJDEPE Field Sampling Procedures Manual.

2.12 Samples For Heated Headspace Gas Chromatography THC Analysis.

Soil samples were collected in glass jars with screw cap lids. Water samples were collected in 40-ml VOA vials with Teflon lined screw cap lids. Sampling was conducted in accordance with procedures specified in the NJDEPE Field Sampling Procedures Manual.

ATTACHMENT QQ-12

2.2 ANALYTICAL METHODS

2.21 Samples For Semi Volatile Extraction And GC/MS Analysis/Characterization.

In the Mobile Environmental Laboratory a portion of each of the soil samples was weighed into a 25 ml extraction flask with a teflon lined screw cap. The samples were spin/extracted with methylene chloride. The methylene chloride semi-volatiles extract was analyzed by Capillary Column Gas Chromatography/Mass Spectrometry.

2.22 Samples For Total Hydrocarbons Volatile Fraction

These samples were analyzed by the method of Heated Headspace Capillary Column Gas Chromatography With Flame Ionization Detector. The contents of the VOA vials were decanted (water samples) into 20-ml HHS vials. Portions of the soil samples were weighed into HHS vials containing a Matrix Modifying Solution. The analysis of Total Hydrocarbons Volatile Fraction is based on the total response of all volatile hydrocarbons which elute before Naphthalene and quantitation is based on the response factor of Benzene (Naphthalene and higher boiling compounds are not included as volatile components of this analysis). This method is not intended to distinguish Total Non-Methane Hydrocarbons (TNMHC) from Total Hydrocarbons.

For the methods outlined above, the minimum quantifiable amount (MQA) for TPHC by GC/MS in soil/sediment has been tentatively set at 1,000 ppm. The MQA by GC/MS for TPHC in water has been tentatively set at 100 ppm.

The minimum quantifiable amount (MQA) for THC Volatile Fraction by HHS GC in soil/sediment has been tentatively set at 100 ppb. The MQA by HHS GC for THC Volatile Fraction in water has been tentatively set at 20 ppb.

3.0 CHARACTERIZATION OF TPHC SAMPLES

3.1 GC/MS FINGERPRINTING

Samples were "fingerprinted" by the on board UNIX computer system, matching the mass spectra of the most abundant hydrocarbon peaks of each sample with those found in the mobile laboratory's 43,000 compound NBS mass spectral computer library.

Samples were characterized still further by examining the extracted ion chromatograms of the mass 57 ion fragments, characteristic of alkane/alkene (straight and branched chain) petroleum hydrocarbon structure.

This computer analysis, as well as the mass spectral analysis mentioned above, typically identified the major constituents of the one reported sample as branched chain C11 to C21 hydrocarbons (the proportion of PNA's in the total "product" was extremely small).

3.2 CONCLUSIONS

Only one soil sample analyzed by GC/MS was reported as having TPHC's above the minimum quantifiable amount. This sample did not appear similar to the "product", identified as "Paperboard BEC", withdrawn from the wellhead and analyzed prior to this sampling event.

In contrast, this sample appeared identical to the sample analyzed and reported in the previous report referenced above, identified as "PA-5" (See Mobile Laboratory Report for Paperboard Specialties dated Oct. 12, 1993).

This sample is characterized as having a molecular weight range consistent with a kerosene or diesel fuel (C11 to C 21) with the major constituent of the oil being a C15 compound (Trimethyldecane), with little or no detectable gasoline or BTEX fraction. The major constituents of the oil are branched chain hydrocarbons with minor amounts of higher molecular weight branched chain hydrocarbons, and trimethyl naphthalenes. Much higher molecular weight compounds (as high as C29, "nonacosane") were also seen; however, their proportion in the total mixture was exceedingly small. Please see significant mass spectra, attached.

The individual compounds, identified from the NBS mass spectral library, were not confirmed with actual standards - their mass spectra may be reviewed with the mobile laboratory staff if desired.

PCB's (Arochlors) were not detected in any of the samples analyzed.

Please direct questions or comments to Kenneth Glasser or Corey Lakin at the Mobile Environmental Laboratory, EESC, Windsor Industrial Park, Windsor NJ, 609-448-6244.

ATTACHMENT QQ-14

11/18/93

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

ANALYTICAL RESULTS REPORT

LAB METHOD: Total Hydrocarbons, Volatile Fraction, in Water and Soil Samples by Heated Headspace Capillary Column Gas Chromatography with FID Detector.

SITE NAME: Paperboard Specialties
DATE REC'D: 11/10 - 11/12
ANALYZED: 11/10 - 11/17

FIELD SAMP NUMBER	LABORATORY NUM/DESCRIP	MATRIX	TEST PARAMETERS (ppb) THC VOL FRACTION
TB	PPRD1	AQUEOUS	ND
PSSG1109938-10	PPRD2	SOIL	ND
PSUP111093W-1	PPRD3	AQUEOUS	ND
PS111093PA-7	PPRD4	SOIL	ND
PSDG1109936-8	PPRD5	SOIL	4.82E+04
PSDG111093W-2	PPRD6	AQUEOUS	2.29E+04
PA111093PA-8	PPRD7	SOIL	1.35E+02

Ken Clasen for C.W. Lakin

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

NOTE:
Results are reported in scientific notation, where the factor "E+XX" signifies powers of ten.
Results are based on the response factor of Benzene.

LEGEND:
B = DETECTED IN BOTH SAMPLE & TRIP BLANK, ND = NOT DETECTED
J = DETECTED BELOW MINIMUM QUANTIFIABLE AMOUNT

ATTACHMENT QQ-15

11/18/93

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

ANALYTICAL RESULTS REPORT

LAB METHOD: Total Petroleum Hydrocarbons in Water and Soil Samples by Capillary Column Gas Chromatography/Mass Spectrometry.

SITE NAME: Paperboard Specialties
DATE REC'D: 11/10 - 11/12
ANALYZED: 11/11 - 11/17

FIELD SAMP NUMBER	LABORATORY NUM/DESCRIP	MATRIX	TEST PARAMETERS (ppm) TPHC
PS11093PA-7	PSPA-7	SOIL	ND
PSSG1109938-10	PSSG-810	SOIL	ND
PSDG1109936-8	PSDG-68	SOIL	1.74E+03
PA111093PA-8	PA-8	SOIL	ND

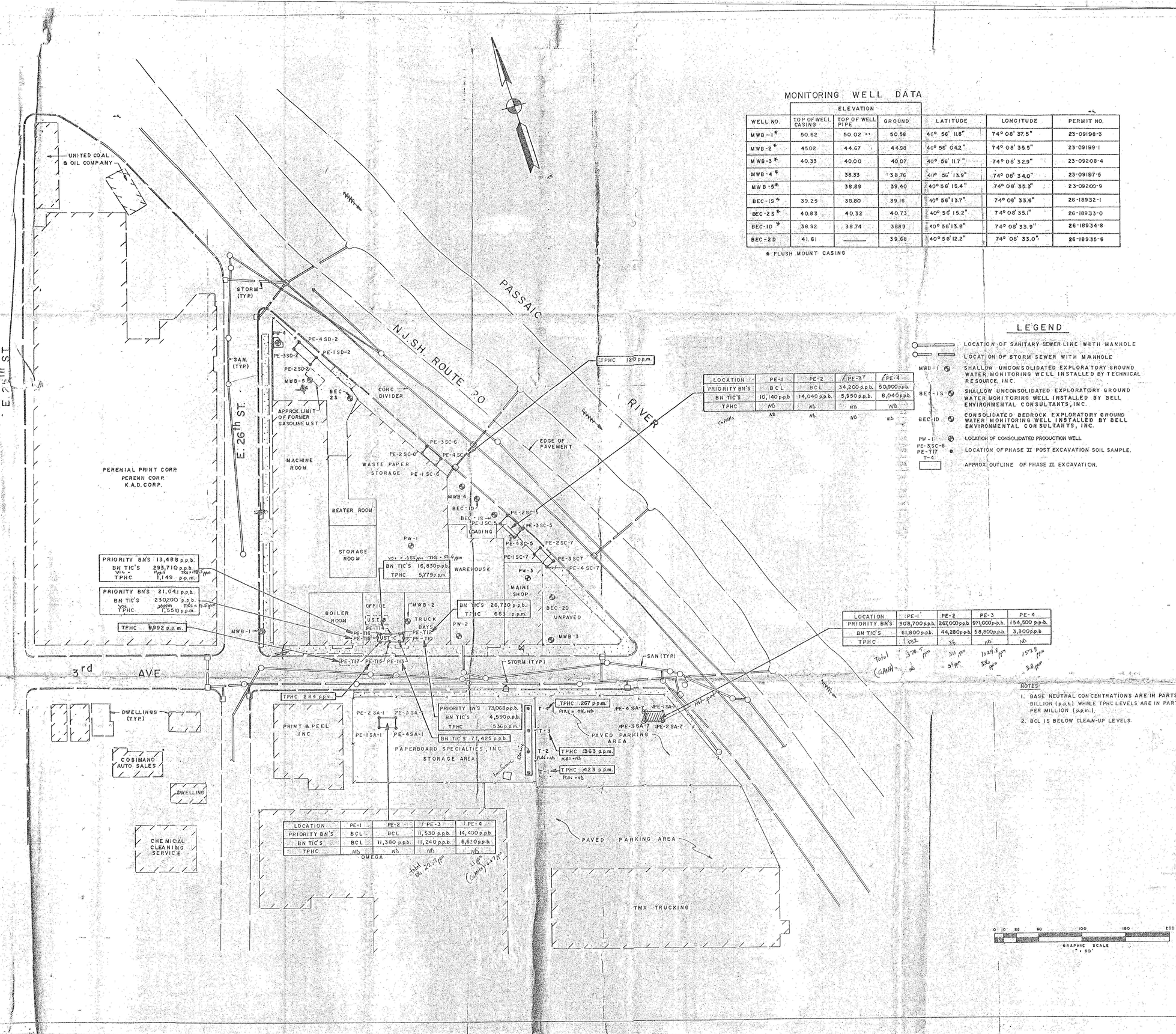
Ken Adams

NJDEPE MOBILE ENVIRONMENTAL LABORATORY

NOTE:
Results are reported in scientific notation, where the factor "E+XX" signifies powers of ten.
Results are based on supplied TPHC product.

LEGEND:
B = DETECTED IN BOTH SAMPLE & TRIP BLANK, ND = NOT DETECTED
J = DETECTED BELOW MINIMUM QUANTIFIABLE AMOUNT

ATTACHMENT 99-16



MONITORING WELL DATA

WELL NO.	ELEVATION: TOP OF WELL CASING	ELEVATION: TOP OF WELL PIPE	ELEVATION: GROUND	LATITUDE	LONGITUDE	PERMIT NO.
MWB-1*	50.62	50.02 **	50.58	40° 56' 11.8"	74° 08' 37.5"	23-09198-3
MWB-2*	45.02	44.67	44.98	40° 56' 04.2"	74° 08' 35.5"	23-09199-1
MWB-3*	40.33	40.00	40.07	40° 56' 11.7"	74° 08' 32.9"	23-09208-4
MWB-4*		38.33	38.76	40° 56' 13.9"	74° 08' 34.0"	23-09197-5
MWB-5*		38.89	39.40	40° 56' 15.4"	74° 08' 35.3"	23-09200-9
BEC-1S*	39.25	38.80	39.16	40° 56' 13.7"	74° 08' 33.6"	26-18932-1
BEC-2S*	40.83	40.32	40.73	40° 56' 15.2"	74° 08' 35.1"	26-18933-0
BEC-1D*	38.92	38.74	38.89	40° 56' 13.8"	74° 08' 33.9"	26-18934-8
BEC-2D	41.61	———	39.68	40° 56' 12.2"	74° 08' 33.0"	26-18935-6

* FLUSH MOUNT CASING

LOCATION	PE-1	PE-2	PE-3	PE-4
PRIORITY BN'S	BCL	BCL	34,200 p.p.b.	50,900 p.p.b.
BN TIC'S	10,140 p.p.b.	14,040 p.p.b.	5,950 p.p.b.	8,040 p.p.b.
TPHC	ND	ND	ND	ND

LOCATION	PE-1	PE-2	PE-3	PE-4
PRIORITY BN'S	308,700 p.p.b.	267,000 p.p.b.	971,000 p.p.b.	154,500 p.p.b.
BN TIC'S	61,800 p.p.b.	44,280 p.p.b.	58,800 p.p.b.	3,300 p.p.b.
TPHC	1,582	35	ND	ND

LOCATION	PE-1	PE-2	PE-3	PE-4
PRIORITY BN'S	BCL	BCL	11,530 p.p.b.	14,400 p.p.b.
BN TIC'S	BCL	11,380 p.p.b.	11,240 p.p.b.	6,620 p.p.b.
TPHC	ND	ND	ND	ND

LEGEND

- LOCATION OF SANITARY SEWER LINE WITH MANHOLE
- LOCATION OF STORM SEWER WITH MANHOLE
- MWB-1 — SHALLOW UNCONSOLIDATED EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY TECHNICAL RESOURCE, INC.
- BEC-1S — SHALLOW UNCONSOLIDATED EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY BELL ENVIRONMENTAL CONSULTANTS, INC.
- BEC-1D — CONSOLIDATED BEDROCK EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY BELL ENVIRONMENTAL CONSULTANTS, INC.
- PW-1 — LOCATION OF CONSOLIDATED PRODUCTION WELL
- PE-3SC-6, PE-717, T-4 — LOCATION OF PHASE II POST EXCAVATION SOIL SAMPLE.
- APPROX. OUTLINE OF PHASE II EXCAVATION.

NOTES:

1. BASE NEUTRAL CONCENTRATIONS ARE IN PARTS PER BILLION (p.p.b.) WHILE TPHC LEVELS ARE IN PARTS PER MILLION (p.p.m.).
2. BCL IS BELOW CLEAN-UP LEVELS.

REVISION BRIEF	DATE

DESIGNED D.M.B.
DRAWN
CHECKED D.M.B.
APPROVED O.M.B.
DATE

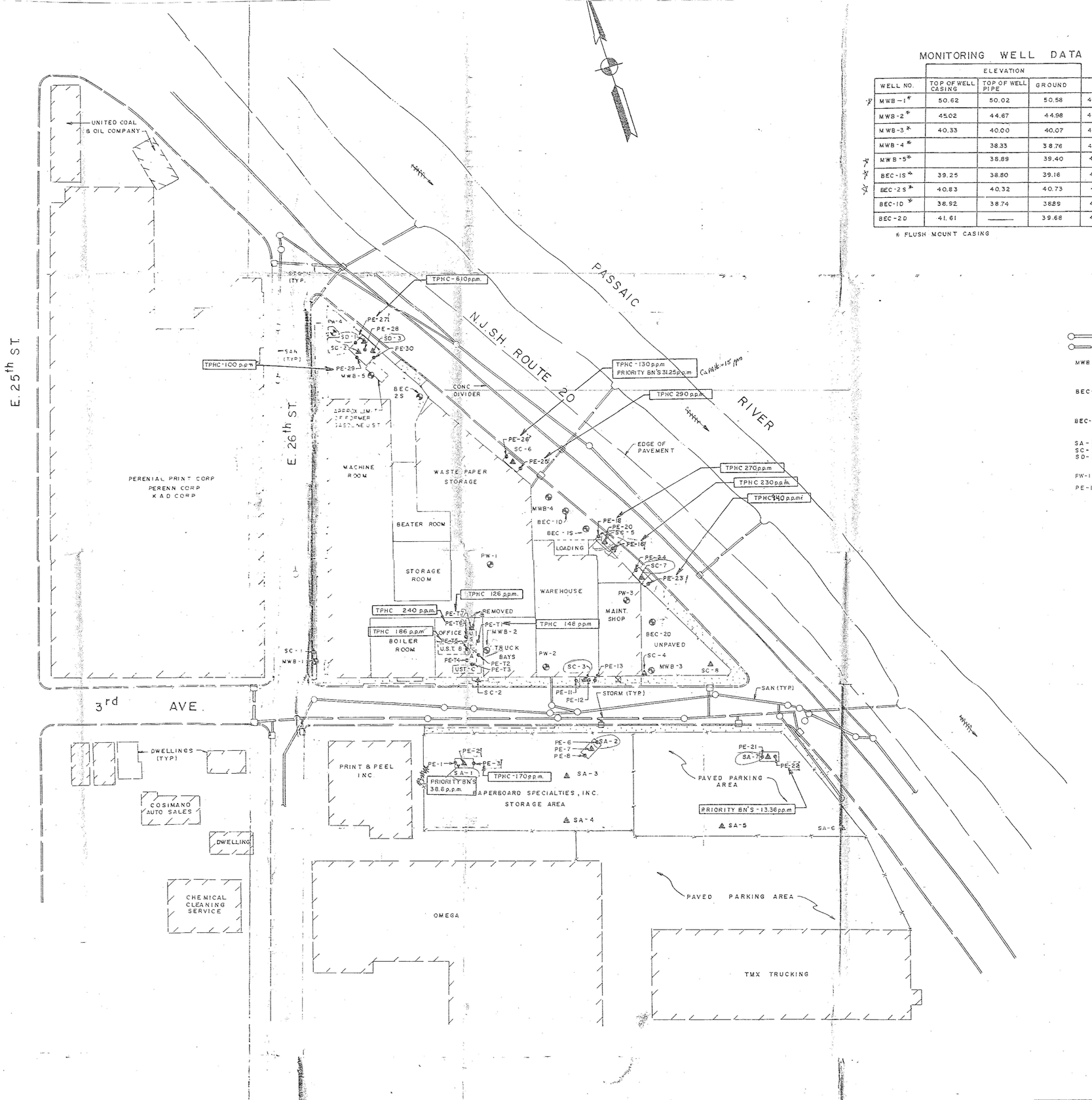
PAPERBOARD SPECIALTIES INC.
Paterson, New Jersey
ECRA Case #85317

SAMPLE LOCATIONS IN EXCESS OF N.J.D.E.P. GUIDELINE LEVELS

FIGURE 7

ATTACHMENT QQ-17

JOB 89-039-01 | No. | B/O | TOTAL



MONITORING WELL DATA

WELL NO.	ELEVATION: TOP OF WELL CASING	ELEVATION: TOP OF WELL PIPE	ELEVATION: GROUND	LATITUDE	LONGITUDE	PERMIT NO.
MWB-1*	50.62	50.02	50.58	40° 56' 11.8"	74° 08' 37.5"	23-09198-3
MWB-2*	45.02	44.67	44.98	40° 56' 04.2"	74° 08' 35.5"	23-09199-1
MWB-3*	40.33	40.00	40.07	40° 56' 11.7"	74° 08' 32.9"	23-09208-4
MWB-4*		38.33	38.76	40° 56' 13.9"	74° 08' 34.0"	23-09197-5
MWB-5*		38.89	39.40	40° 56' 15.4"	74° 08' 35.3"	23-09200-9
BEC-1S*	39.25	38.80	39.16	40° 56' 13.7"	74° 08' 33.6"	26-18932-1
BEC-2S*	40.83	40.32	40.73	40° 56' 15.2"	74° 08' 35.1"	26-18933-0
BEC-1D*	38.92	38.74	38.89	40° 56' 13.8"	74° 08' 33.9"	26-18934-8
BEC-2D	41.61	———	39.68	40° 56' 12.2"	74° 08' 33.0"	26-18935-6

* FLUSH MOUNT CASING

LEGEND

- LOCATION OF SANITARY SEWER LINE WITH MANHOLE
- LOCATION OF STORM SEWER WITH MANHOLE
- MWB-1 — SHALLOW UNCONSOLIDATED EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY TECHNICAL RESOURCE, INC.
- BEC-1S — SHALLOW UNCONSOLIDATED EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY BELL ENVIRONMENTAL CONSULTANTS, INC.
- BEC-1D — CONSOLIDATED BEDROCK EXPLORATORY GROUND WATER MONITORING WELL INSTALLED BY BELL ENVIRONMENTAL CONSULTANTS, INC.
- SA-1, SC-1, SD-1 — APPROXIMATE LOCATION OF SHALLOW SOIL SAMPLE OBTAINED BY TECHNICAL RESOURCES.
- FW-1 — LOCATION OF CONSOLIDATED PRODUCTION WELL
- PE-1 — LOCATION OF PHASE I POST-EXCAVATION SOIL SAMPLE.

GRAPHIC SCALE 1" = 50'

DATE	REVISION BRIEF

DESIGNED D.M.B.
DRAWN J.S.
CHECKED D.M.B.
APPROVED D.M.B.
DATE 7/13/90

DATE _____

PAPERBOARD SPECIALTIES INC.
Paterson, New Jersey
ECRA Case #85317

PHASE I SAMPLE LOCATIONS IN EXCESS OF N.J.D.E.P. GUIDE LINES

FIGURE 6

ATTACHMENT 2-18

JOB 89-039-01 | No. | SHT. | TOTAL

ATTACHMENT RR

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292910

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292910V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	2	J
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	22	U
111-44-4	bis(-2-Chloroethyl)Ether	22	U
95-57-8	2-Chlorophenol	22	U
541-73-1	1,3-Dichlorobenzene	8	J
106-46-7	1,4-Dichlorobenzene	22	U
95-50-1	1,2-Dichlorobenzene	22	U
95-48-7	2-Methylphenol	22	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
120-82-1	1,2,4-Trichlorobenzene	3	J
91-20-3	Naphthalene	22	U
106-47-8	4-Chloroaniline	22	U
87-68-3	Hexachlorobutadiene	22	U
59-50-7	4-Chloro-3-Methylphenol	22	U
91-57-6	2-Methylnaphthalene	22	U
77-47-4	Hexachlorocyclopentadiene	22	U
88-06-2	2,4,6-Trichlorophenol	22	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	22	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	22	U
208-96-8	Acenaphthylene	22	U
606-20-2	2,6-Dinitrotoluene	22	U
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	22	U

ATTACHMENT RR-2

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	22	U
121-14-2	2,4-Dinitrotoluene	22	U
84-66-2	Diethylphthalate	22	U
7005-72-3	4-Chlorophenyl-phenylether	22	U
86-73-7	Fluorene	22	U
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-nitrosodiphenylamine (1)	4	J
101-55-3	4-Bromophenyl-phenylether	22	U
118-74-1	Hexachlorobenzene	22	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	22	U
120-12-7	Anthracene	22	U
86-74-8	Carbazole	22	U
84-74-2	Di-n-butylphthalate	50	
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	17	JB
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	Dibenz(a,h)anthracene	22	U
191-24-2	Benzo(g,h,i)perylene	22	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-3

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 19

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.98	4	J
2.	UNKNOWN DIMETHYLNAPHTHALENE	8.09	8	J
3.	UNKNOWN C3-ALKYLNAPHTHALENE	9.22	5	J
4.	UNKNOWN NAPHTHALENE DERIVATI	10.42	17	J
5.	UNKNOWN NAPHTHALENE DERIVATI	10.63	31	J
6.	UNKNOWN AROMATIC COMPOUND	11.05	5	J
7.	UNKNOWN ALIPHATIC COMPOUND	11.98	6	J
8. 10544-50-0	SULFUR, MOL. (S8) W/UNKNOWN	13.84	7	NJZ
9.	UNKNOWN	14.28	1300	J
10.	UNKNOWN	14.36	7	J
11.	UNKNOWN ALIPHATIC COMPOUND	14.44	5	J
12.	UNKNOWN	14.98	6	J
13.	UNKNOWN SILOXANE	15.03	6	J
14.	UNKNOWN	15.46	5	J
15.	UNKNOWN	15.65	190	J
16.	UNKNOWN ALIPHATIC COMPOUND	15.90	12	J
17.	UNKNOWN ALIPHATIC COMPOUND	16.01	5	J
18.	UNKNOWN	16.89	13	J
19.	UNKNOWN	19.11	19	J
20.				
21.				
22.				
23.				
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25.				
26.				
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29.				
30.				

ATTACHMENT RR-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292739

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	73.0	B		P_
7440-36-0	Antimony_	2.5	U		P_
7440-38-2	Arsenic__	2.8	U		P_
7440-39-3	Barium___	303			P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	52100			P_
7440-47-3	Chromium_	0.90	B		P_
7440-48-4	Cobalt___	1.4	U		P_
7440-50-8	Copper___	1.8	B		P_
7439-89-6	Iron_____	16100			P_
7439-92-1	Lead_____	1.6	U		P_
7439-95-4	Magnesium	8020			P_
7439-96-5	Manganese	1160			P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	3.0	B		P_
7440-09-7	Potassium	4910	B		P_
7782-49-2	Selenium_	2.2	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	79500			P_
7440-28-0	Thallium_	2.3	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc_____	145		E	P_
	Cyanide__	5.0	U	N	AS

Color Before: WHITE____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-5

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292913

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292913V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	1	J
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	3	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-6

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292743

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: P292743I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/28/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	27	U
95-95-4	2,4,5-Trichlorophenol	11	U
91-58-7	2-Chloronaphthalene	27	U
88-74-4	2-Nitroaniline	11	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	27	U
99-09-2	3-Nitroaniline	11	U
83-32-9	Acenaphthene		

ATTACHMENT RR-7

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292743

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: P292743I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/28/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	27	U
100-02-7	4-Nitrophenol	27	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	27	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	27	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	11	B
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-8

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292743

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: P292743I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/28/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.46	40	NJAB
2.	UNKNOWN ALIPHATIC COMPOUND	13.37	5	J
3.	UNKNOWN ALIPHATIC COMPOUND	13.95	5	J
4.	UNKNOWN ALIPHATIC COMPOUND	14.33	6	J
5.	UNKNOWN POLYALKOXY ALCOHOL	19.82	2	JB
6.	UNKNOWN POLYALKOXY ALCOHOL	21.24	5	JB
7.	UNKNOWN POLYALKOXY ALCOHOL	21.58	4	JB
8.	UNKNOWN POLYCYCLIC HYDROCARB	25.58	7	J
9.	UNKNOWN POLYCYCLIC HYDROCARB	27.25	5	J
10.	UNKNOWN ALIPHATIC COMPOUND	28.11	5	J
11.	UNKNOWN ALIPHATIC COMPOUND	28.24	9	J
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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29.				
30.				

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292743

Level (low/med): LOW__ Date Received: 03/01/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	151	B		P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	139	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	29600			P
7440-47-3	Chromium_	0.69	B		P
7440-48-4	Cobalt___	1.4	U		P
7440-50-8	Copper___	11.4	B		P
7439-89-6	Iron_____	5250			P
7439-92-1	Lead_____	4.3			P
7439-95-4	Magnesium	3830	B		P
7439-96-5	Manganese	426			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	1.4	U		P
7440-09-7	Potassium	4850	B		P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	80600			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	2.4	B		P
7440-66-6	Zinc_____	17.3	B	E	P
	Cyanide__	5.0	U	N	AS

Color Before: GRAY_____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-10

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292912

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292912V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)		

ATTACHMENT RR-11

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292912

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292912V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 0

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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ATTACHMENT RR-12

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742

Sample wt/vol: 983.0 (g/mL) ML Lab File ID: Q292742I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

ATTACHMENT ___

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742

Sample wt/vol: 983.0 (g/mL) ML Lab File ID: Q292742I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-13

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742

Sample wt/vol: 983.0 (g/mL) ML Lab File ID: Q292742I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.71	15	NJAB
2.	UNKNOWN POLYALKOXY ALCOHOL	21.60	4	JB
3.	UNKNOWN POLYALKOXY ALCOHOL	22.06	2	JB
4.	UNKNOWN POLYALKOXY ALCOHOL	23.27	2	JB
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ATTACHMENT RR-14

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1RE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742R1

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: R292742R3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/02/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

ATTACHMENT RR-15

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742

Sample wt/vol: 983.0 (g/mL) ML Lab File ID: Q292742I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.71	15	NJAB
2.		UNKNOWN POLYALKOXY ALCOHOL	21.60	4	JB
3.		UNKNOWN POLYALKOXY ALCOHOL	22.06	2	JB
4.		UNKNOWN POLYALKOXY ALCOHOL	23.27	2	JB
5.					
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ATTACHMENT RR-16

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292742

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	7180			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	3.2	B		P
7440-39-3	Barium___	402			P
7440-41-7	Beryllium	0.86	B		P
7440-43-9	Cadmium__	1.2	B		P
7440-70-2	Calcium__	193000			P
7440-47-3	Chromium_	9.6	B		P
7440-48-4	Cobalt___	9.3	B		P
7440-50-8	Copper___	26.0			P
7439-89-6	Iron_____	8520			P
7439-92-1	Lead____	12.8			P
7439-95-4	Magnesium	38600			P
7439-96-5	Manganese	2960			P
7439-97-6	Mercury__	0.48			CV
7440-02-0	Nickel___	45.2			P
7440-09-7	Potassium	6780			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	2.1	B		P
7440-23-5	Sodium___	813000			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	11.2	B		P
7440-66-6	Zinc_____	103		E	P
	Cyanide__	18.6		N	AS

Color Before: ORANGE___ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-17

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292914

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292914V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	33	
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	38	

ATTACHMENT RR-18

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292914

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292914V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 14

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 78-78-4	BUTANE, 2-METHYL-	3.53	11	NJ
2. 96-37-7	CYCLOPENTANE, METHYL-	7.13	9	NJ
3. 98-82-8	BENZENE, (1-METHYLETHYL)-	13.60	10	NJ
4. 103-65-1	BENZENE, PROPYL-	14.10	18	NJ
5.	UNKNOWN ETHYLMETHYLBENZENE	14.22	22	J
6. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	14.30	21	NJ
7. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	14.56	47	NJ
8. 95-63-6	BENZENE, 1,2,4-TRIMETHYL-	14.78	82	NJ
9. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	15.39	15	NJ
10.	UNKNOWN SUBSTITUTED BENZENES	15.70	23	JZ
11.	UNKNOWN C4-ALKYLBENZENE	15.80	10	J
12.	UNKNOWN C4-ALKYLBENZENE	16.28	6	J
13.	UNKNOWN C4-ALKYLBENZENE	16.44	12	J
14.	UNKNOWN C3-SUBSTITUTED BENZE	16.66	9	J
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ATTACHMENT RR-19

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	1	J
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

ATTACHMENT RR-20

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	27	U
100-02-7	4-Nitrophenol	27	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	27	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	27	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	12	B
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-21

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	4.04	4	NJ
2. 95-36-3	BENZENE, 1,2,4-TRIMETHYL-	4.18	9	NJ
3. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	4.65	5	NJ
4.	UNKNOWN C4-ALKYLBENZENE	4.97	3	J
5.	UNKNOWN ALIPHATIC COMPOUND	5.00	3	J
6.	UNKNOWN AROMATIC COMPOUND	5.79	4	J
7.	UNKNOWN	7.33	3	J
8.	UNKNOWN	14.42	3	J
9.	UNKNOWN ALIPHATIC ACID ESTER	15.92	3	J
10.	UNKNOWN SILOXANE	18.75	3	J
11.	UNKNOWN SILOXANE	19.52	2	J
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ATTACHMENT RR-22

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292744

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	59500			P
7440-36-0	Antimony_	5.2	B		P
7440-38-2	Arsenic__	48.4			P
7440-39-3	Barium___	559			P
7440-41-7	Beryllium	2.6	B		P
7440-43-9	Cadmium__	19.0			P
7440-70-2	Calcium__	55400			P
7440-47-3	Chromium_	106			P
7440-48-4	Cobalt___	169			P
7440-50-8	Copper___	354			P
7439-89-6	Iron_____	143000			P
7439-92-1	Lead_____	157			P
7439-95-4	Magnesium	16600			P
7439-96-5	Manganese	3900			P
7439-97-6	Mercury__	0.44			CV
7440-02-0	Nickel___	97.3			P
7440-09-7	Potassium	12400			P
7782-49-2	Selenium_	6.4			P
7440-22-4	Silver___	5.2	B		P
7440-23-5	Sodium___	24600			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	119			P
7440-66-6	Zinc_____	831		E	P
	Cyanide__	7.3		N	AS

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-23

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292916

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292916V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-24

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292746

Sample wt/vol: 894.0 (g/mL) ML Lab File ID: R292746S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

ATTACHMENT RR-25

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292746

Sample wt/vol: 894.0 (g/mL) ML Lab File ID: R292746S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	28	U
100-02-7	4-Nitrophenol	28	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	28	U
534-52-1	4,6-Dinitro-2-methylphenol	28	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	28	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-26

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292746

Sample wt/vol: 894.0 (g/mL) ML Lab File ID: R292746S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.41	4	J
2. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.47	5	NJ
3.	UNKNOWN C4-ALKYLBENZENE W/UN	5.51	5	JZ
4. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.61	6	NJZ
5.	UNKNOWN SUBSTITUTED BENZENE	5.80	5	JZ
6.	UNKNOWN	6.04	7	J
7.	UNKNOWN AROMATIC COMPOUND	6.15	5	J
8.	UNKNOWN NAPHTHALENE DERIVATI	6.40	4	J
9.	UNKNOWN ALIPHATIC COMPOUND	6.45	3	J
10.	UNKNOWNS	6.52	6	JZ
11.	UNKNOWN	6.58	4	J
12.	UNKNOWN ALIPHATIC COMPOUND	6.81	4	J
13.	UNKNOWN	6.87	3	J
14.	UNKNOWN AROMATIC COMPOUND	6.90	3	J
15.	UNKNOWN ALIPHATIC COMPOUND	6.95	7	J
16.	UNKNOWN	7.17	4	J
17.	UNKNOWN	7.36	4	J
18.	UNKNOWN	7.40	8	J
19.	UNKNOWN	7.52	9	J
20.	UNKNOWN ALIPHATIC COMPOUND	7.66	11	J
21.	UNKNOWN	7.81	10	J
22.	UNKNOWN	7.99	4	J
23.	UNKNOWN ALIPHATIC COMPOUND	8.07	6	J
24.	UNKNOWN ALIPHATIC COMPOUND	8.14	30	J
25.	UNKNOWN ALIPHATIC COMPOUND	8.40	4	J
26.	UNKNOWN ALIPHATIC COMPOUND	8.47	24	J
27.	UNKNOWN ALIPHATIC COMPOUND W	9.22	6	JZ
28.	UNKNOWN	9.34	8	J
29.	UNKNOWN AROMATIC COMPOUND	10.74	4	J
30.	UNKNOWN POLYALKOXY ALCOHOL	14.29	12	J

ATTACHMENT RR-27

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292746

Level (low/med): LOW__ Date Received: 03/01/96

Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	246			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	4.4	B		P
7440-39-3	Barium___	546			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	274000			P
7440-47-3	Chromium_	0.81	B		P
7440-48-4	Cobalt___	1.4	U		P
7440-50-8	Copper___	1.2	B		P
7439-89-6	Iron_____	16000			P
7439-92-1	Lead_____	4.8			P
7439-95-4	Magnesium	14000			P
7439-96-5	Manganese	881			P
7439-97-6	Mercury__	0.11	B		CV
7440-02-0	Nickel___	2.3	B		P
7440-09-7	Potassium	14700			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	394000			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	1.6	U		P
7440-66-6	Zinc_____	36.7		E	P
	Cyanide__	5.0	U	N	AS

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-28

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292917

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292917V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-29

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747

Sample wt/vol: 906.0 (g/mL) ML Lab File ID: Q292747I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

ATTACHMENT RR-30

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747

Sample wt/vol: 906.0 (g/mL) ML Lab File ID: Q292747I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	28	U
100-02-7	4-Nitrophenol	28	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	28	U
534-52-1	4,6-Dinitro-2-methylphenol	28	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	28	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-31

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747

Sample wt/vol: 906.0 (g/mL) ML Lab File ID: Q292747I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 29

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	26	NJAB
2.	UNKNOWN SUBSTITUTED BENZENE	11.10	3	J
3.	UNKNOWN ALIPHATIC COMPOUND	12.03	3	J
4.	UNKNOWN	12.43	2	J
5.	UNKNOWN	13.25	3	J
6.	UNKNOWN	13.41	3	J
7.	UNKNOWN	13.51	2	J
8.	UNKNOWN	13.54	3	J
9.	UNKNOWN	13.68	3	J
10.	UNKNOWN	14.06	6	J
11.	UNKNOWN	14.31	4	J
12.	UNKNOWN SILOXANE	14.53	2	J
13.	UNKNOWN	14.69	6	J
14.	UNKNOWN	14.89	3	J
15.	UNKNOWN ALIPHATIC COMPOUND	15.06	2	J
16.	UNKNOWN	15.27	3	J
17.	UNKNOWN	15.80	4	J
18.	UNKNOWN	15.85	2	J
19.	UNKNOWN	16.02	3	J
20.	UNKNOWN SILOXANE	16.12	2	J
21.	UNKNOWN	16.30	4	J
22.	UNKNOWN ALIPHATIC COMPOUND	16.37	3	J
23.	UNKNOWN	16.93	4	J
24.	UNKNOWN ALIPHATIC COMPOUND	17.12	4	J
25.	UNKNOWN	17.29	3	J
26.	UNKNOWN	17.41	3	J
27.	UNKNOWN SILOXANE	17.48	3	J
28.	UNKNOWN SILOXANE	23.37	2	J
29.	UNKNOWN SILOXANE	24.28	2	J
30.				

ATTACHMENT RR-32

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292747

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	225000			P
7440-36-0	Antimony_	4.6	B		P
7440-38-2	Arsenic__	161			P
7440-39-3	Barium___	2740			P
7440-41-7	Beryllium	19.1			P
7440-43-9	Cadmium__	3.2	B		P
7440-70-2	Calcium__	138000			P
7440-47-3	Chromium_	653			P
7440-48-4	Cobalt___	166			P
7440-50-8	Copper___	1320			P
7439-89-6	Iron_____	760000			P
7439-92-1	Lead_____	945			P
7439-95-4	Magnesium	50800			P
7439-96-5	Manganese	6630			P
7439-97-6	Mercury__	3.2			CV
7440-02-0	Nickel___	415			P
7440-09-7	Potassium	18400			P
7782-49-2	Selenium_	7.8			P
7440-22-4	Silver___	4.1	B		P
7440-23-5	Sodium___	26600			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	657			P
7440-66-6	Zinc_____	1840		E	P
	Cyanide__	27.9		N	AS

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-33

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292918

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292918V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	3	J
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	6	J
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	9	J
1330-20-7	Xylene (total)		

ATTACHMENT RR-34

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292918

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292918V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 11

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 98-82-8	BENZENE, (1-METHYLETHYL)-	13.60	6	NJ
2. 103-65-1	BENZENE, PROPYL-	14.10	7	NJ
3.	UNKNOWN ETHYLMETHYLBENZENE	14.22	8	J
4. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	14.31	9	NJ
5. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	14.57	8	NJ
6. 95-63-6	BENZENE, 1,2,4-TRIMETHYL-	14.79	27	NJ
7. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	15.39	7	NJ
8.	UNKNOWN SUBSTITUTED BENZENES	15.70	11	JZ
9.	UNKNOWN C4-ALKYLBENZENE	15.81	5	J
10.	UNKNOWN C4-ALKYLBENZENE	16.45	6	J
11.	UNKNOWN SUBSTITUTED BENZENES	16.69	9	JZ
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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ATTACHMENT RR-35

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	22	U
111-44-4	bis(-2-Chloroethyl)Ether	22	U
95-57-8	2-Chlorophenol	22	U
541-73-1	1,3-Dichlorobenzene	22	U
106-46-7	1,4-Dichlorobenzene	22	U
95-50-1	1,2-Dichlorobenzene	22	U
95-48-7	2-Methylphenol	22	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
120-82-1	1,2,4-Trichlorobenzene	22	U
91-20-3	Naphthalene	22	
106-47-8	4-Chloroaniline	22	U
87-68-3	Hexachlorobutadiene	22	U
59-50-7	4-Chloro-3-Methylphenol	22	U
91-57-6	2-Methylnaphthalene	16	J
77-47-4	Hexachlorocyclopentadiene	22	U
88-06-2	2,4,6-Trichlorophenol	22	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	22	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	22	U
208-96-8	Acenaphthylene	22	U
606-20-2	2,6-Dinitrotoluene	22	U
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	22	U

ATTACHMENT RR-36

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	54	U
100-02-7	4-Nitrophenol	54	U
132-64-9	Dibenzofuran	4	J
121-14-2	2,4-Dinitrotoluene	22	U
84-66-2	Diethylphthalate	22	U
7005-72-3	4-Chlorophenyl-phenylether	22	U
86-73-7	Fluorene	7	J
100-01-6	4-Nitroaniline	54	U
534-52-1	4,6-Dinitro-2-methylphenol	54	U
86-30-6	N-nitrosodiphenylamine (1)	22	U
101-55-3	4-Bromophenyl-phenylether	22	U
118-74-1	Hexachlorobenzene	22	U
87-86-5	Pentachlorophenol	54	U
85-01-8	Phenanthrene	8	J
120-12-7	Anthracene	22	U
86-74-8	Carbazole	22	U
84-74-2	Di-n-butylphthalate	22	U
206-44-0	Fluoranthene	1	J
129-00-0	Pyrene	2	J
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	3	J
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
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	Dibenz(a,h)anthracene	22	U
191-24-2	Benzo(g,h,i)perylene	22	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-37

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 95-36-3	BENZENE, 1,2,4-TRIMETHYL- W/	4.35	150	NJZ
2.	UNKNOWN C4-ALKYLBENZENE	5.53	8	J
3. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.62	11	NJ
4.	UNKNOWN SUBSTITUTED BENZENES	5.72	10	JZ
5.	UNKNOWN SUBSTITUTED BENZENES	5.81	9	JZ
6.	UNKNOWN	6.35	8	J
7.	UNKNOWN ALIPHATIC COMPOUND	6.57	9	J
8. 90-12-0	NAPHTHALENE, 1-METHYL-	7.20	32	NJ
9.	UNKNOWN ALIPHATIC COMPOUND	7.37	14	J
10.	UNKNOWN DIMETHYLNAPHTHALENE	7.98	50	J
11.	UNKNOWN DIMETHYLNAPHTHALENE	8.15	97	J
12.	UNKNOWN DIMETHYLNAPHTHALENE	8.30	35	J
13.	UNKNOWN ALIPHATIC COMPOUND	8.48	58	J
14.	UNKNOWN C3-ALKYLNAPHTHALENE	9.11	66	JZ
15.	UNKNOWN C3-ALKYLNAPHTHALENE	9.29	24	J
16.	UNKNOWN	9.36	28	J
17.				
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U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292748

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	16500			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	18.5			P
7440-39-3	Barium___	853			P
7440-41-7	Beryllium	0.52	B		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	140000			P
7440-47-3	Chromium_	69.3			P
7440-48-4	Cobalt___	26.1	B		P
7440-50-8	Copper___	39.2			P
7439-89-6	Iron_____	58200			P
7439-92-1	Lead_____	25.8			P
7439-95-4	Magnesium	46600			P
7439-96-5	Manganese	24400			P
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	25.9	B		P
7440-09-7	Potassium	10400			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	91400			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	39.2	B		P
7440-66-6	Zinc_____	87.5		E	P
	Cyanide__	99.5		N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-39

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292919

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292919V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	12	
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	2	J

FORM I VOA

OLM03.0

ATTACHMENT RR-40

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292919

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292919V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 5

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 98-82-8	BENZENE, (1-METHYLETHYL)-	13.61	8	NJ
2. 103-65-1	BENZENE, PROPYL-	14.09	9	NJ
3.	UNKNOWN SUBSTITUTED BENZENE	15.71	22	J
4.	UNKNOWN C4-ALKYLBENZENE	16.45	5	J
5.	UNKNOWN SUBSTITUTED BENZENES	16.68	12	JZ
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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ATTACHMENT RR-41

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) MI Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	10	J
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	1	J

ATTACHMENT RR-42

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	27	U
100-02-7	4-Nitrophenol	27	U
132-64-9	Dibenzofuran	1	J
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	2	J
100-01-6	4-Nitroaniline	27	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	27	U
85-01-8	Phenanthrene	2	J
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	1	JB
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-43

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 75-85-4	AMYLENE HYDRATE	4.10	9	NJ
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.80	42	NJAB
3. 98-82-8	BENZENE, (1-METHYLETHYL)-	8.00	7	NJ
4. 103-65-1	BENZENE, PROPYL-	8.42	9	NJ
5.	UNKNOWN C4-ALKYLBENZENE	9.71	6	J
6.	UNKNOWN C4-SUBSTITUTED BENZE	10.20	12	JZ
7.	UNKNOWN	10.50	5	J
8.	UNKNOWN C4-ALKYLBENZENE	10.62	10	J
9.	UNKNOWN INDENE DERIVATIVE	10.95	9	J
10.	UNKNOWN C4-SUBSTITUTED BENZE	11.11	21	JZ
11.	UNKNOWN INDENE DERIVATIVE	11.68	5	J
12.	UNKNOWN	11.93	5	J
13.	UNKNOWN	12.50	8	J
14.	UNKNOWN	12.65	7	J
15. 90-12-0	NAPHTHALENE, 1-METHYL-	13.14	30	NJ
16.	UNKNOWN	13.20	5	J
17.	UNKNOWN	13.36	9	J
18.	UNKNOWN	13.52	8	J
19.	UNKNOWN	13.74	8	J
20.	UNKNOWN	13.93	5	J
21.	UNKNOWN DIMETHYLNAPHTHALENE	14.13	12	J
22.	UNKNOWN DIMETHYLNAPHTHALENE	14.29	22	J
23.	UNKNOWN DIMETHYLNAPHTHALENE	14.53	6	J
24.	UNKNOWN DIMETHYLNAPHTHALENE	14.68	7	J
25.	UNKNOWN	15.32	5	J
26.	UNKNOWNS W/DIBENZOFURAN	15.35	5	JZ
27.	UNKNOWN C3-ALKYLNAPHTHALENE	15.42	8	JZ
28.	UNKNOWN	16.39	12	J
29.	UNKNOWN	16.83	6	J
30.	UNKNOWN ALIPHATIC COMPOUND	20.24	8	J

ATTACHMENT RR-44

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292749

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1240			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	3.5	B		P
7440-39-3	Barium___	584			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	115000			P
7440-47-3	Chromium_	2.7	B		P
7440-48-4	Cobalt___	1.4	U		P
7440-50-8	Copper___	16.7	B		P
7439-89-6	Iron_____	77800			P
7439-92-1	Lead_____	8.9			P
7439-95-4	Magnesium	15500			P
7439-96-5	Manganese	9070			P
7439-97-6	Mercury__	0.22			CV
7440-02-0	Nickel___	4.1	B		P
7440-09-7	Potassium	5640			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	240000			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	6.5	B		P
7440-66-6	Zinc_____	73.0		E	P
_____	Cyanide__	5.0	U	N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-45

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292920

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292920V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	2	J
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-46

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292920

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292920V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

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

Number TICs found: 4

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ETHYLMETHYLBENZENE	14.20	7	J
2. 611-14-3	BENZENE, 1-ETHYL-2-METHYL-	14.56	5	NJ
3. 95-63-6	BENZENE, 1,2,4-TRIMETHYL-	14.79	12	NJ
4.	UNKNOWN SUBSTITUTED BENZENES	15.70	6	JZ
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ATTACHMENT RR-47

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292750

Sample wt/vol: 931.0 (g/mL) ML Lab File ID: R292750S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292750

Sample wt/vol: 931.0 (g/mL) ML Lab File ID: R292750S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	27	U
100-02-7	4-Nitrophenol	27	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	27	U
534-52-1	4,6-Dinitro-2-methylphenol	27	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	27	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292750

Sample wt/vol: 931.0 (g/mL) ML Lab File ID: R292750S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	3.96	5	NJ
2. 95-36-3	1,2,4-TRIMETHYLBENZENE	4.19	6	NJ
3.	UNKNOWN C4-ALKYLBENZENE	4.89	4	J
4.	UNKNOWN C4-ALKYLBENZENE	5.16	3	J
5.	UNKNOWN C4-ALKYLBENZENE	5.49	3	J
6.	UNKNOWN C4-ALKYLBENZENE	5.53	4	J
7.	UNKNOWN SUBSTITUTED BENZENES	5.81	4	JZ
8.	UNKNOWN SILOXANE	16.04	2	J
9.	UNKNOWN	16.36	2	J
10.	UNKNOWN SILOXANE	16.43	2	J
11.	UNKNOWN SILOXANE	18.74	4	J
12.	UNKNOWN SILOXANE	19.51	2	J
13.				
14.				
15.				
16.				
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19.				
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ATTACHMENT RR-50

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292750

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	1170			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	118	B		P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	72500			P
7440-47-3	Chromium_	2.5	B		P
7440-48-4	Cobalt___	2.4	B		P
7440-50-8	Copper___	10.2	B		P
7439-89-6	Iron_____	3340			P
7439-92-1	Lead_____	2.3	B		P
7439-95-4	Magnesium	10000			P
7439-96-5	Manganese	1010			P
7439-97-6	Mercury__	0.17	B		CV
7440-02-0	Nickel___	5.3	B		P
7440-09-7	Potassium	5120			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	23300			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	2.1	B		P
7440-66-6	Zinc_____	34.6		E	P
	Cyanide__	5.0	U	N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-51

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292921

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292921I3V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	12	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	22	
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	1	J
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	4	J

ATTACHMENT RR-52

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022790 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292921

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292921I3V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/13/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN C3-ALKYLCYCLOHEXANE	11.83	19	J
2.	UNKNOWN C3-ALKYLCYCLOHEXANE	12.72	20	J
3.	UNKNOWN C10-ALKANE	13.29	27	J
4. 1678-92-8	CYCLOHEXANE, PROPYL- W/C10-A	13.46	42	NJZ
5.	UNKNOWN C4-ALKYLCYCLOHEXANE	14.00	28	J
6.	UNKNOWN C4-ALKYLCYCLOHEXANE	14.27	35	J
7.	UNKNOWN	14.34	26	J
8.	UNKNOWN C11-ALKANE	14.65	25	J
9.	UNKNOWN C11-ALKANE W/UNKNOWN	14.98	20	JZ
10. 1678-93-9	CYCLOHEXANE, BUTYL-	15.10	42	NJ
11.	UNKNOWN C5-ALKYLCYCLOHEXANE	15.53	20	JZ
12.	UNKNOWN C3-SUBSTITUTED BENZE	15.71	28	J
13.	UNKNOWN POLYCYCLIC HYDROCARB	15.86	40	JZ
14.	UNKNOWN ALKYLCYCLOHEXANE W/C	16.02	25	JZ
15.	UNKNOWN C3-ALKYLCYCLOHEXANE	16.14	28	J
16.	UNKNOWN	16.33	28	J
17.	UNKNOWN C4-ALKYLBENZENE	16.45	25	J
18.	UNKNOWN SUBSTITUTED BENZENES	16.69	27	JZ
19.	UNKNOWN POLYCYCLIC HYDROCARB	16.99	33	JZ
20. 4292-92-6	CYCLOHEXANE, PENTYL-	17.11	24	J
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ATTACHMENT RR-53

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	21	U
111-44-4	bis(-2-Chloroethyl)Ether	21	U
95-57-8	2-Chlorophenol	21	U
541-73-1	1,3-Dichlorobenzene	21	U
106-46-7	1,4-Dichlorobenzene	21	U
95-50-1	1,2-Dichlorobenzene	21	U
95-48-7	2-Methylphenol	21	U
108-60-1	2,2'-oxybis(1-Chloropropane)	21	U
106-44-5	4-Methylphenol	21	U
621-64-7	N-Nitroso-di-n-propylamine	21	U
67-72-1	Hexachloroethane	21	U
98-95-3	Nitrobenzene	21	U
78-59-1	Isophorone	21	U
88-75-5	2-Nitrophenol	21	U
105-67-9	2,4-Dimethylphenol	21	U
111-91-1	bis(2-Chloroethoxy)methane	21	U
120-83-2	2,4-Dichlorophenol	21	U
120-82-1	1,2,4-Trichlorobenzene	21	U
91-20-3	Naphthalene	21	U
106-47-8	4-Chloroaniline	21	U
87-68-3	Hexachlorobutadiene	21	U
59-50-7	4-Chloro-3-Methylphenol	21	U
91-57-6	2-Methylnaphthalene	2	J
77-47-4	Hexachlorocyclopentadiene	21	U
88-06-2	2,4,6-Trichlorophenol	21	U
95-95-4	2,4,5-Trichlorophenol	53	U
91-58-7	2-Chloronaphthalene	21	U
88-74-4	2-Nitroaniline	53	U
131-11-3	Dimethylphthalate	21	U
208-96-8	Acenaphthylene	21	U
606-20-2	2,6-Dinitrotoluene	21	U
99-09-2	3-Nitroaniline	53	U
83-32-9	Acenaphthene	21	U

ATTACHMENT RR-54

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 100^(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	53	U
100-02-7	4-Nitrophenol	53	U
132-64-9	Dibenzofuran	21	U
121-14-2	2,4-Dinitrotoluene	21	U
84-66-2	Diethylphthalate	21	U
7005-72-3	4-Chlorophenyl-phenylether	21	U
86-73-7	Fluorene	21	U
100-01-6	4-Nitroaniline	53	U
534-52-1	4,6-Dinitro-2-methylphenol	53	U
86-30-6	N-nitrosodiphenylamine (1)	21	U
101-55-3	4-Bromophenyl-phenylether	21	U
118-74-1	Hexachlorobenzene	21	U
87-86-5	Pentachlorophenol	53	U
85-01-8	Phenanthrene	11	J
120-12-7	Anthracene	21	U
86-74-8	Carbazole	21	U
84-74-2	Di-n-butylphthalate	21	U
206-44-0	Fluoranthene	21	U
129-00-0	Pyrene	2	J
85-68-7	Butylbenzylphthalate	21	U
91-94-1	3,3'-Dichlorobenzidine	21	U
56-55-3	Benzo(a)anthracene	21	U
218-01-9	Chrysene	2	J
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB
117-84-0	Di-n-octylphthalate	21	U
205-99-2	Benzo(b)fluoranthene	21	U
207-08-9	Benzo(k)fluoranthene	21	U
50-32-8	Benzo(a)pyrene	21	U
193-39-5	Indeno(1,2,3-cd)pyrene	21	U
53-70-3	Dibenz(a,h)anthracene	21	U
191-24-2	Benzo(g,h,i)perylene	21	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-55

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.79	28	NJAB
2. 611-14-3	BENZENE, 1-ETHYL-2-METHYL- W	8.79	18	NJZ
3.	UNKNOWN W/2-CHLOROPHENOL-D4	8.99	21	JZ
4.	UNKNOWN C4-ALKYLBENZENE	9.71	17	J
5. 493-02-7	NAPHTHALENE, DECAHYDRO-, TRA	9.90	20	NJ
6.	UNKNOWN C4-ALKYLBENZENE	10.20	24	J
7.	UNKNOWN C4-ALKYLBENZENE W/UN	10.62	22	JZ
8.	UNKNOWN NAPHTHALENE DERIVATI	10.85	21	J
9.	UNKNOWN SUBSTITUTED BENZENES	11.13	26	JZ
10.	UNKNOWN ALIPHATIC COMPOUND	11.49	16	J
11.	UNKNOWN	11.93	24	J
12.	UNKNOWN NAPHTHALENE DERIVATI	12.53	22	J
13.	UNKNOWN W/1-METHYLNAPHTHALEN	13.15	32	JZ
14. 90-12-0	NAPHTHALENE, 1-METHYL-	13.18	33	NJ
15.	UNKNOWN NAPHTHALENE DERIVATI	13.75	110	J
16.	UNKNOWN DIMETHYLNAPHTHALENE	14.17	94	J
17.	UNKNOWN DIMETHYLNAPHTHALENE	14.32	270	JZ
18.	UNKNOWN ALIPHATIC COMPOUND	14.74	120	J
19.	UNKNOWN	15.14	42	J
20.	UNKNOWN C3-ALKYLNAPHTHALENE	15.40	74	J
21.	UNKNOWN C3-ALKYLNAPHTHALENE	15.47	50	J
22.	UNKNOWN C3-ALKYLNAPHTHALENE	15.63	52	J
23.	UNKNOWN	18.71	16	J
24.	UNKNOWN METHYLPHENANTHRENE W	19.13	50	JZ
25.	UNKNOWN	19.47	26	J
26.	UNKNOWN DIMETHYLPHENANTHRENE	19.99	40	J
27.	UNKNOWN POLYCYCLIC HYDROCARB	21.72	18	J
28.	UNKNOWN ALIPHATIC COMPOUND	25.68	19	J
29.	UNKNOWN POLYCYCLIC HYDROCARB	28.27	21	J
30.	UNKNOWN POLYCYCLIC HYDROCARB	29.39	18	J

ATTACHMENT RR-5C

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292751

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	41500			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	21.5			P
7440-39-3	Barium___	974			P
7440-41-7	Beryllium	1.7	B		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	105000			P
7440-47-3	Chromium_	68.0			P
7440-48-4	Cobalt___	29.0	B		P
7440-50-8	Copper___	80.4			P
7439-89-6	Iron____	116000			P
7439-92-1	Lead____	148			P
7439-95-4	Magnesium	30200			P
7439-96-5	Manganese	11900			P
7439-97-6	Mercury__	0.27			CV
7440-02-0	Nickel___	81.0			P
7440-09-7	Potassium	15600			P
7782-49-2	Selenium_	3.0	B		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	99400			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	106			P
7440-66-6	Zinc____	190		E	P
	Cyanide__	16.6		N	AS

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-57

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292915

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292915V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-58

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No. SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292915

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292915V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
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30.					

ATTACHMENT RR-59

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292745

Sample wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	1	J
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

ATTACHMENT RR-60

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292745

Sample wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	28	U
100-02-7	4-Nitrophenol	28	U
132-64-9	Dibenzofuran	11	U
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	11	U
100-01-6	4-Nitroaniline	28	U
534-52-1	4,6-Dinitro-2-methylphenol	28	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	28	U
85-01-8	Phenanthrene	11	U
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	11	U
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	1	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-61

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292745

Sample wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN ALIPHATIC COMPOUND	4.96	4	J
2.	UNKNOWN	5.05	3	J
3.	UNKNOWN	5.14	4	J
4.	UNKNOWN	5.34	5	J
5.	UNKNOWN ALIPHATIC COMPOUND	6.30	6	J
6.	UNKNOWN ALIPHATIC COMPOUND	6.54	6	J
7.	UNKNOWN ALIPHATIC COMPOUND	6.68	8	J
8.	UNKNOWN	6.86	8	J
9.	UNKNOWN ALIPHATIC COMPOUND	6.99	6	J
10.	UNKNOWN ALIPHATIC COMPOUND	7.12	4	J
11.	UNKNOWN ALIPHATIC COMPOUND	7.67	13	J
12.	UNKNOWN	7.81	8	J
13.	UNKNOWN	8.12	10	J
14.	UNKNOWN	8.30	6	J
15.	UNKNOWN	8.44	21	J
16.	UNKNOWN	9.09	13	J
17.	UNKNOWN	9.35	5	J
18.	UNKNOWN	9.64	8	J
19.	UNKNOWN	9.78	6	J
20.	UNKNOWN	9.91	10	J
21.	UNKNOWN AROMATIC COMPOUND	10.06	12	J
22.	UNKNOWN	10.38	7	J
23.	UNKNOWN	10.53	22	J
24.	UNKNOWN	10.76	15	J
25.	UNKNOWN	10.92	9	J
26.	UNKNOWN AROMATIC COMPOUND	11.08	13	J
27.	UNKNOWN	11.33	9	J
28.	UNKNOWN	12.53	12	J
29.	UNKNOWN	13.76	5	J
30.	UNKNOWN SILOXANE	18.76	7	J

ATTACHMENT RR-62

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292745

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	7270			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	9.8	B		P
7440-39-3	Barium___	199	B		P
7440-41-7	Beryllium	0.21	B		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	96000			P
7440-47-3	Chromium_	14.9			P
7440-48-4	Cobalt___	5.4	B		P
7440-50-8	Copper___	21.4	B		P
7439-89-6	Iron_____	45200			P
7439-92-1	Lead_____	78.4			P
7439-95-4	Magnesium	17100			P
7439-96-5	Manganese	784			P
7439-97-6	Mercury__	0.32			CV
7440-02-0	Nickel___	11.8	B		P
7440-09-7	Potassium	12600			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	49900			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	25.7	B		P
7440-66-6	Zinc_____	64.1		E	P
	Cyanide__	24.4		N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-63

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ26

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292922

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292922V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	3	J
75-34-3	1,1-Dichloroethane	12	
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	J
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-64

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ26

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292752

Sample wt/vol: 892.0 (g/mL) ML Lab File ID: Q292752I3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	6	J

ATTACHMENT RR-65

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ26

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292752

Sample wt/vol: 892.0 (g/mL) ML Lab File ID: Q292752I3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	28	U
100-02-7	4-Nitrophenol	28	U
132-64-9	Dibenzofuran	5	J
121-14-2	2,4-Dinitrotoluene	11	U
84-66-2	Diethylphthalate	11	U
7005-72-3	4-Chlorophenyl-phenylether	11	U
86-73-7	Fluorene	8	J
100-01-6	4-Nitroaniline	28	U
534-52-1	4,6-Dinitro-2-methylphenol	28	U
86-30-6	N-nitrosodiphenylamine (1)	11	U
101-55-3	4-Bromophenyl-phenylether	11	U
118-74-1	Hexachlorobenzene	11	U
87-86-5	Pentachlorophenol	28	U
85-01-8	Phenanthrene	2	J
120-12-7	Anthracene	11	U
86-74-8	Carbazole	11	U
84-74-2	Di-n-butylphthalate	1	JB
206-44-0	Fluoranthene	11	U
129-00-0	Pyrene	11	U
85-68-7	Butylbenzylphthalate	11	U
91-94-1	3,3'-Dichlorobenzidine	11	U
56-55-3	Benzo(a)anthracene	11	U
218-01-9	Chrysene	11	U
117-81-7	bis(2-Ethylhexyl)phthalate	9	JB
117-84-0	Di-n-octylphthalate	11	U
205-99-2	Benzo(b)fluoranthene	11	U
207-08-9	Benzo(k)fluoranthene	11	U
50-32-8	Benzo(a)pyrene	11	U
193-39-5	Indeno(1,2,3-cd)pyrene	11	U
53-70-3	Dibenz(a,h)anthracene	11	U
191-24-2	Benzo(g,h,i)perylene	11	U

(1) - Cannot be separated from Diphenylamine

ATTACHMENT RR-66

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ26

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292752

Sample wt/vol: 892.0 (g/mL) ML Lab File ID: Q292752I3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.79	45	NJAB
2. 493-02-7	NAPHTHALENE, DECAHYDRO-, TRA	9.90	10	NJZ
3.	UNKNOWN C4-ALKYLBENZENE	10.63	21	J
4.	UNKNOWN NAPHTHALENE DERIVATI	10.84	8	JZ
5.	UNKNOWN AROMATIC COMPOUND	11.12	14	J
6.	UNKNOWN AROMATIC COMPOUND	11.70	14	J
7.	UNKNOWN AROMATIC COMPOUND	12.49	12	J
8.	UNKNOWN AROMATIC COMPOUND	12.72	8	J
9.	UNKNOWN AROMATIC COMPOUND W/	12.79	12	J
10. 90-12-0	NAPHTHALENE, 1-METHYL-	13.14	26	NJ
11.	UNKNOWN AROMATIC COMPOUND W/	13.21	15	JZ
12.	UNKNOWN	13.32	9	J
13.	UNKNOWN ETHYLNAPHTHALENE	14.05	8	J
14.	UNKNOWN DIMETHYLNAPHTHALENE	14.12	15	J
15.	UNKNOWN DIMETHYLNAPHTHALENE	14.31	64	JZ
16.	UNKNOWN DIMETHYLNAPHTHALENE	14.34	30	JZ
17.	UNKNOWN DIMETHYLNAPHTHALENE	14.52	14	J
18.	UNKNOWN DIMETHYLNAPHTHALENE	14.56	12	J
19.	UNKNOWN DIMETHYLNAPHTHALENE	14.70	16	J
20.	UNKNOWN C3-ALKYLNAPHTHALENE	15.12	8	J
21.	UNKNOWN C3-ALKYLNAPHTHALENE	15.34	18	JZ
22.	UNKNOWN C3-ALKYLNAPHTHALENE	15.40	16	J
23.	UNKNOWN C3-ALKYLNAPHTHALENE	15.58	18	J
24.	UNKNOWN AROMATIC COMPOUND W/	15.70	10	JZ
25.	UNKNOWN C3-ALKYLNAPHTHALENE	15.74	14	J
26.	UNKNOWN C3-ALKYLNAPHTHALENE	15.78	9	J
27.	UNKNOWN AROMATIC COMPOUND	16.71	10	J
28.	UNKNOWN AROMATIC COMPOUND W/	16.89	11	JZ
29.	UNKNOWN AROMATIC COMPOUND	17.14	13	J
30.	UNKNOWN AROMATIC COMPOUND	17.35	10	J

ATTACHMENT RR-67

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ26

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292752

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	700			P
7440-36-0	Antimony_	2.5	U		P
7440-38-2	Arsenic__	2.8	U		P
7440-39-3	Barium___	706			P
7440-41-7	Beryllium	0.10	U		P
7440-43-9	Cadmium__	0.30	U		P
7440-70-2	Calcium__	134000			P
7440-47-3	Chromium_	8.2	B		P
7440-48-4	Cobalt___	2.1	B		P
7440-50-8	Copper___	13.6	B		P
7439-89-6	Iron____	33900			P
7439-92-1	Lead____	3.4			P
7439-95-4	Magnesium	19900			P
7439-96-5	Manganese	5970			P
7439-97-6	Mercury__	0.11	B		CV
7440-02-0	Nickel___	4.7	B		P
7440-09-7	Potassium	7510			P
7782-49-2	Selenium_	2.2	U		P
7440-22-4	Silver___	0.70	U		P
7440-23-5	Sodium___	119000			P
7440-28-0	Thallium_	2.3	U		P
7440-62-2	Vanadium_	1.6	U		P
7440-66-6	Zinc____	26.0		E	P
	Cyanide__	5.0	U	N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-68

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292911

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292911V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/08/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-69

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292740

Sample wt/vol: 974.0 (g/mL) ML Lab File ID: Q292740I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(-2-Chloroethyl)Ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U

ATTACHMENT RR-70

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292740

Sample wt/vol: 974.0 (g/mL) ML Lab File ID: Q292740I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	1	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	16	B
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292740

Sample wt/vol: 974.0 (g/mL) ML Lab File ID: Q292740I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.79	47	NJAB
2.	UNKNOWN POLYALKOXY ALCOHOL	20.18	3	JB
3.	UNKNOWN POLYALKOXY ALCOHOL	21.60	3	JB
4.	UNKNOWN POLYALKOXY ALCOHOL	21.96	5	JB
5.	UNKNOWN POLYALKOXY ALCOHOL	23.21	2	JB
6.	UNKNOWN SILOXANE	25.33	2	JB
7.				
8.				
9.				
10.				
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30.				

ATTACHMENT RR-72

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292923

Sample wt/vol: 5.000 (g/mL) ML Lab File ID: M292923V

Level: (low/med) LOW Date Received: 03/06/96

% Moisture: not dec. _____ Date Analyzed: 03/12/96

GC Column: CAP ID: 0.53 (mm) Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

ATTACHMENT RR-73

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292740

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum_	52.6	B		P_
7440-36-0	Antimony_	2.5	U		P_
7440-38-2	Arsenic__	2.8	U		P_
7440-39-3	Barium___	5.4	U		P_
7440-41-7	Beryllium	0.10	U		P_
7440-43-9	Cadmium__	0.30	U		P_
7440-70-2	Calcium__	143	U		P_
7440-47-3	Chromium_	0.60	U		P_
7440-48-4	Cobalt___	1.4	U		P_
7440-50-8	Copper___	1.0	U		P_
7439-89-6	Iron____	74.8	B		P_
7439-92-1	Lead____	1.6	U		P_
7439-95-4	Magnesium	137	U		P_
7439-96-5	Manganese	1.4	B		P_
7439-97-6	Mercury__	0.10	U		CV
7440-02-0	Nickel___	1.4	U		P_
7440-09-7	Potassium	136	U		P_
7782-49-2	Selenium_	2.2	U		P_
7440-22-4	Silver___	0.70	U		P_
7440-23-5	Sodium___	187	U		P_
7440-28-0	Thallium_	2.3	U		P_
7440-62-2	Vanadium_	1.6	U		P_
7440-66-6	Zinc____	7.0	B	E	P_
	Cyanide__	5.0	U	N	AS

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT RR-74

ATTACHMENT SS

State of New Jersey

Department of Environmental Protection

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

MEMORANDUM

OCT 0 2 1996

TO: Kris Geller, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli 10/2/96
Joseph Sanguiliano 10-2-96
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Bridget Manson B.M. 10/2/1996
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Data validation of the sampling event conducted at the **Paperboard Specialties Inc., Paterson** site on February 28, 1996.

Samples Reviewed

Field ID	Organic Lab ID	Collection Date	Sample Matrix
TB-1	292923	2/28/96	Trip Blank
FB-1	292740	2/28/96	Field Blank
BEC-2D	292739	2/28/96	Groundwater
JSS-1	292741	2/29/96	Non-aqueous
MWB-1	292742	2/28/96	Groundwater
MWB-3	292743	2/28/96	Groundwater
MWB-5	292744	2/28/96	Groundwater
NJ-12	294748	2/28/96	Groundwater
NJ-13	292749	2/28/96	Groundwater
NJ-14	292750	2/28/96	Groundwater
NJ-15	292751	2/28/96	Groundwater
NJ-26	293752	2/28/96	Groundwater
NJ-2A	292745	2/28/96	Groundwater
NJ-7	292746	2/28/96	Groundwater
NJ-9	292747	2/28/96	Groundwater

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ATTACHMENT SS-1

The Bureau of Environmental Measurements and Quality Assurance has reviewed the above mentioned samples for Volatile Organics, Semi-volatile Organics, Pesticides/PCBs and Inorganics. Sampling was performed by the Environmental Measurements and Site Assessment Section of the Bureau of Environmental Measurements and Quality Assurance. Analyses were performed by Inchcape Testing Services according to the USEPA CLP SOW for Organics Analysis, OLM03.1 and the USEPA CLP SOW for Inorganics Analysis, ILM03.0. Full deliverables are required as per Laboratory Services Contract X-22651. Please refer to the detailed data validation report, the attached modified analysis data sheets and the target and non-target compound summary list for additional information. Comments are provided below.

Chain of Custody Deficiencies

The chain of custody documents were deficient for all of the samples as detailed below. This may be a problem if the data is used in litigation.

1. The dates of sampling initiation and termination are illegible on the chain of custody documents for the following samples: NJ-13, NJ-7, NJ-26, MWB-3, BEC-2D, MWB-5, NJ-9, NJ-12 and NJ-23. The date of sampling termination is illegible for samples NJ-14 and MWB-1. Also, the sampling container opening date is not recorded for sample MWB-1.

2. The dates that the shipping container was opened are incorrect for samples MWB-3, BEC-2D, NJ-14 and MWB-5. The chain of custody documents were incomplete for samples TB, FB and NJ-15. Sample NJ-23 was not received at the laboratory. Numerous additional deficiencies in the chain of custody documents were detailed by the laboratory on pages 2459-2463 of the data package.

Volatile Organics

1. The Volatile Organics results and detection limits are highly qualified for all samples based on the elapsed time of seven days between sampling and receipt of the sample vials at the laboratory. The results may be biased significantly low and the non-detects may be false.

2. The results for sample NJ-15 are quantitatively qualified because the recovery of the surrogate compound Toluene-d8 was above the QC limit of 88-110%.

3. The laboratory reported the GC/MS tuning criteria incorrectly on form 5A. At present, QAS has no action related to this deficiency.

Semi-volatile Organics

1. The results for samples MWB-1 are rejected based on surrogate outliers in this sample. The surrogates were within QC limits in the reanalysis of the sample. Please refer to the reanalysis of the sample for the usable results.

ATTACHMENT SS-2

2. Surrogate outliers were present in sample NJ-9 and the reanalysis of the sample. This is indicative of a sample matrix effect. Therefore, the results for samples NJ-9 and NJ-9RE are qualified.

3. The laboratory reported the GC/MS tuning criteria incorrectly on form 5B. At present, QAS has no action related to this deficiency.

Pesticides/PCBs

1. The reported results for all samples are qualified based on the recovery of the Florisil cleanup check compound, 2,4,5-Trichlorophenol, of 54% which did not meet the QC requirements of less than 5%.

2. The %D between the results obtained from the two columns exceeded 25% in sample JSS-1 for 4,4'-DDE, Endrin, 4,4'-DDD, 4,4'-DDT, Endrin Aldehyde and alpha-Chlordane and in sample JSS-1DL for Endrin and Endrin Aldehyde. The results are quantitatively qualified based on this deficiency.

3. The laboratory indicated that Aroclor 1260 may have contributed to the results for all of the compounds detected in samples JSS-1 and JSS-1DL with the exception of Heptachlor Epoxide. The reported results are quantitatively qualified based on this problem.

4. The scaling requirements of greater than 25% and less than 100% of full scale were not met for Aroclors 1221 and 1232 on column RTX-35 and Aroclors 1016, 1221, 1232 and 1242 on column RTX-1701. This was not found to be a problem because the Aroclor patterns were easily determined.

5. The forms 6F submitted by the laboratory for the multi-component compounds incorrectly reported the retention times for the compounds. The laboratory was contacted and the forms were resubmitted.

Inorganics

1. The non-detect results for Cyanide are rejected in all samples based on the sample spike recovery of less than 30%. The non-detects may be false.

2. Analytes were qualified because they were outside quality control limits for the following analyses: holding time to analysis, CRDL standard, preparation blank, sample spike, post-digestion spike and ICP serial dilution. Please refer to the modified inorganic data sheets for the specific qualifications.

Please contact this office at 3-0752 if you have any questions concerning this review.

c. William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT SS-3

Target and Non-target Compound Summary List

Site Name: **Paperboard Specialties Inc.**

Sample Compound	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
TB-1(Trip Blank)					
Volatile Organics(ug/L)	U	U	UJ	qualify	26
FB-1(Field Blank)					
Volatile Organics(ug/L)	U	U	UJ	qualify	26
BEC-2D					
Volatile Organics(ug/L)					
1,1-Dichloroethane	U	2J	2J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
MWB-1					
Volatile Organics(ug/L)					
Chloroform	U	2J	2J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
MWB-3					
Volatile Organics(ug/L)					
1,1-Dichloroethane	U	1J	1J	qualify	1,27
1,1,1-Trichloroethane	U	3J	3J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
MWB-5					
Volatile Organics(ug/L)					
Chloroform	U	1J	1J	qualify	1,27
Toluene	U	2J	2J	qualify	1,27
Ethylbenzene	U	33	33J	qualify	27
Xylene(Total)	U	38	38J	qualify	27
all non-detects	U	U	UJ	qualify	26
14 Non-targets	U	J	J	qualify	2
NJ-7					
Volatile Organics(ug/L)	U	U	UJ	qualify	26

ATTACHMENT SS-4

Target and Non-target Compound Summary List

Site Name: **Paperboard Specialties Inc.**

Sample Compound	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
NJ-9					
Volatile Organics(ug/L)	U	U	UJ	qualify	26
NJ-12					
Volatile Organics(ug/L)					
Benzene	U	3J	3J	qualify	1,27
Ethylbenzene	U	6J	6J	qualify	1,27
Xylene(Total)	U	9J	9J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
11 Non-targets	U	J	J	qualify	2
NJ-13					
Volatile Organics(ug/L)					
Benzene	U	12	12J	qualify	27
Xylene(Total)	U	2J	2J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
5 Non-targets	U	J	J	qualify	2
NJ-14					
Volatile Organics(ug/L)					
Chloroform	U	2J	2J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
4 Non-targets	U	J	J	qualify	2
NJ-15					
Volatile Organics(ug/L)					
Acetone	U	12	12J	qualify	4,27
2-Butanone	U	22	22J	qualify	4,27
Benzene	U	1J	1J	qualify	1,4,27
Xylene(Total)	U	4J	4J	qualify	1,4,27
all non-detects	U	U	UJ	qualify	26
20 Non-targets	U	J	J	qualify	2

ATTACHMENT SS-5

Target and Non-target Compound Summary List

Site Name: **Paperboard Specialties Inc.**

Sample Compound	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
NJ-15RE					
Volatile Organics(Dilution factor=20)(ug/L)					
Acetone	U	12	12J	qualify	24,27
Benzene	U	1J	1J	qualify	24,27
Xylene(Total)	U	2J	2J	qualify	24,27
all non-detects	U	U	UJ	qualify	26
3 Non-targets	U	J	J	qualify	2
NJ-2A					
Volatile Organics(ug/L)	U	U	UJ	qualify	26
NJ-26					
Volatile Organics(ug/L)					
1,1-Dichloroethene	U	3J	3J	qualify	1,27
1,1-Dichloroethane	U	12	12J	qualify	27
1,1,1-Trichloroethane	U	5J	5J	qualify	1,27
all non-detects	U	U	UJ	qualify	26
2 Non-targets	U	J	J	qualify	2
JSS-1DL					
Pesticides/PCBs(Dilution factor=500)(ug/kg)					
Endrin	U	28000DJP	28000J	qualify	7,22,23,24,25
Endrin Aldehyde	U	75000DP	75000J	qualify	7,22,23,25
Aroclor 1260	U	2500000D	2500000J	qualify	22,23
JSS-1					
Pesticides/PCBs(Dilution factor=50)(ug/kg)					
Heptachlor Epoxide	U	1400J	1400J	qualify	23,24
4,4'-DDE	U	4800JP	4800J	qualify	7,23,24,25
Endrin	U	21000P	21000J	qualify	7,23,25
4,4'-DDD	U	3400JP	3400J	qualify	7,23,24,25
4,4'-DDT	U	110000EP	110000J	qualify	7,8,23,25
Endrin Aldehyde	U	69000P	69000J	qualify	7,23,25
alpha-Chlordane	U	1600JP	1600J	qualify	7,23,24,25
Aroclor 1260	U	1500000E	1500000J	qualify	8,23

ATTACHMENT SS-6

Footnotes:

1. The reported concentration is quantitatively qualified because the concentration is below the CRQL.

2. The non-target compound is qualified "J" and considered quantitatively to be an estimated value because relative response factors are not calculated for non-target compounds.

3. The value reported is greater than three (3) times the value in the trip/field blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to trip/field blank contamination.

4. The reported concentration is quantitatively qualified due to poor surrogate recovery.

5. The value reported in the sample is less than or equal to three (3) times the value in the method blank. It is the policy of NJDEP-DPFSR to negate the reported value due to probable contamination unrelated to the actual sample.

6. The reported concentration is rejected due to poor surrogate recoveries.

7. The reported concentration is qualified because the %D between the concentrations calculated for each column is greater than 25%. The lower of the two concentrations is reported.

8. The compounds exceeds the calibration range of the instrument and it is indicated with the "E" qualifier.

9. The reported result is quantitatively qualified because the sample was analyzed one day beyond the holding time.

10. This metal value is qualified because the CRDL is below the recovery range of 80% - 120%. The reported concentration may be biased low.

11. This non-detected metal detection limit is qualified (UJ) because the CRDL standard was below the recovery range (80-120 %).

12. This metal value is qualified because the associated CRDL standard analysis % recovery is above the recovery range of 80-120%. The reported concentration may be biased high.

13. The value reported is greater than three (3) times the value in the prep blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to the prep blank contamination. The "B" qualifier alerts the end-user to the presence of this analyte in the prep blank.

14. The reported result is qualified because the sample spike analysis was not performed at the correct concentration.

15. The non-detected metal value is rejected because the concentration was less than the IDL and the spike recovery was less than 30.0 percent.

16. The metal value is quantitatively qualified because the spike recovery was less than 30.0 percent.

17. The reported metal analyte is quantitatively qualified because the post-digestion spike analysis result was outside the QC limits.

18. The reported metal value is qualified because the serial dilution is not within ten percent (10%) of sample concentration.

19. The reported concentration was quantitatively qualified because the concentration was below the CRDL but greater than the IDL. The concentration is considered estimated since the value obtained is at the low end of the instrument performance.

20. The value reported is less than or equal to three (3) times the value in the field blank. It is the policy of NJDEP-DPFSR to negate the reported value as due to probable contamination unrelated to the actual sample. The end-user, however, is alerted that a reportable quantity of the analyte was detected.

21. The value reported is greater than three (3) times the value in the field blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to field blank contamination.

22. The laboratory was required to dilute the sample to bring the peaks onto scale, the CLP program requires dilutions to be indicated with the "D" qualifier.

23. The reported result is qualified because the recovery of 2,4,5-Trichlorophenol exceeded 5% in Florisil Cleanup.

24. Prior to correction for dilution, the concentration of this compound was less than the CRQL. The concentration of the analyte is qualified and considered to be an estimated value.

25. The reported result is quantitatively qualified because the laboratory suspects Aroclor contribution to this result.

26. The reported detection limit is highly qualified and may be false based on the exceeded holding time between sampling and shipping.

27. The reported result is highly qualified and may be biased low based on the exceeded holding time between sampling and shipping.

28. The reported result is qualified based on a sample matrix effect.

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	Action FN
108-95-2	Phenol	22	U	
111-44-4	bis(-2-Chloroethyl)Ether	22	U	
95-57-8	2-Chlorophenol	22	U	
541-73-1	1,3-Dichlorobenzene	8	J	Qualify 24
106-46-7	1,4-Dichlorobenzene	22	U	
95-50-1	1,2-Dichlorobenzene	22	U	
95-48-7	2-Methylphenol	22	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	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	
120-82-1	1,2,4-Trichlorobenzene	3	J	Qualify 24
91-20-3	Naphthalene	22	U	
106-47-8	4-Chloroaniline	22	U	
87-68-3	Hexachlorobutadiene	22	U	
59-50-7	4-Chloro-3-Methylphenol	22	U	
91-57-6	2-Methylnaphthalene	22	U	
77-47-4	Hexachlorocyclopentadiene	22	U	
88-06-2	2,4,6-Trichlorophenol	22	U	
95-95-4	2,4,5-Trichlorophenol	54	U	
91-58-7	2-Chloronaphthalene	22	U	
88-74-4	2-Nitroaniline	54	U	
131-11-3	Dimethylphthalate	22	U	
208-96-8	Acenaphthylene	22	U	
606-20-2	2,6-Dinitrotoluene	22	U	
99-09-2	3-Nitroaniline	54	U	
83-32-9	Acenaphthene	22	U	

ATTACHMENT SS-9

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Method Blank conc.		Q	Action FN
51-28-5	2,4-Dinitrophenol		54	U	
100-02-7	4-Nitrophenol		54	U	
132-64-9	Dibenzofuran		22	U	
121-14-2	2,4-Dinitrotoluene		22	U	
84-66-2	Diethylphthalate		22	U	
7005-72-3	4-Chlorophenyl-phenylether		22	U	
86-73-7	Fluorene		22	U	
100-01-6	4-Nitroaniline		54	U	
534-52-1	4,6-Dinitro-2-methylphenol		54	U	
86-30-6	N-nitrosodiphenylamine (1)		4	J	Qualify 24
101-55-3	4-Bromophenyl-phenylether		22	U	
118-74-1	Hexachlorobenzene		22	U	
87-86-5	Pentachlorophenol		54	U	
85-01-8	Phenanthrene		22	U	
120-12-7	Anthracene		22	U	
86-74-8	Carbazole		22	U	
84-74-2	Di-n-butylphthalate		50		
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	10	17	JB	Negate 5
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	Dibenz(a,h)anthracene		22	U	
191-24-2	Benzo(g,h,i)perylene		22	U	

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-10

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

BEC2D

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292739

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292739D2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 19

CONCENTRATION UNITS:
(ug/L or ug/Kg) ~~ug/L~~ Action

FN

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.98	Qualify 4	J
2.	UNKNOWN DIMETHYLNAPHTHALENE	8.09	8	J
3.	UNKNOWN C3-ALKYLNAPHTHALENE	9.22	5	J
4.	UNKNOWN NAPHTHALENE DERIVATI	10.42	17	J
5.	UNKNOWN NAPHTHALENE DERIVATI	10.63	31	J
6.	UNKNOWN AROMATIC COMPOUND	11.05	5	J
7.	UNKNOWN ALIPHATIC COMPOUND	11.98	6	J
8. 10544-50-0	SULFUR, MOL. (S8) W/UNKNOWN	13.84	7	NJZ
9.	UNKNOWN	14.28	1300	J
10.	UNKNOWN	14.36	7	J
11.	UNKNOWN ALIPHATIC COMPOUND	14.44	5	J
12.	UNKNOWN	14.98	6	J
13.	UNKNOWN SILOXANE	15.03	6	J
14.	UNKNOWN	15.46	5	J
15.	UNKNOWN	15.65	190	J
16.	UNKNOWN ALIPHATIC COMPOUND	15.90	12	J
17.	UNKNOWN ALIPHATIC COMPOUND	16.01	5	J
18.	UNKNOWN	16.89	13	J
19.	UNKNOWN	19.11	19	J
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ATTACHMENT SS-11

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292740

Sample wt/vol: 974.0 (g/mL) ML Lab File ID: Q292740I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Method Blank Conc.	Q	Action	FN
51-28-5	2,4-Dinitrophenol	26		U		
100-02-7	4-Nitrophenol	26		U		
132-64-9	Dibenzofuran	10		U		
121-14-2	2,4-Dinitrotoluene	10		U		
84-66-2	Diethylphthalate	10		U		
7005-72-3	4-Chlorophenyl-phenylether	10		U		
86-73-7	Fluorene	10		U		
100-01-6	4-Nitroaniline	26		U		
534-52-1	4,6-Dinitro-2-methylphenol	26		U		
86-30-6	N-nitrosodiphenylamine (1)	10		U		
101-55-3	4-Bromophenyl-phenylether	10		U		
118-74-1	Hexachlorobenzene	10		U		
87-86-5	Pentachlorophenol	26		U		
85-01-8	Phenanthrene	10		U		
120-12-7	Anthracene	10		U		
86-74-8	Carbazole	10		U		
84-74-2	Di-n-butylphthalate	1	1	JB	Negate	5
206-44-0	Fluoranthene	10		U		
129-00-0	Pyrene	10		U		
85-68-7	Butylbenzylphthalate	10		U		
91-94-1	3,3'-Dichlorobenzidine	10		U		
56-55-3	Benzo(a)anthracene	10		U		
218-01-9	Chrysene	10		U		
117-81-7	bis(2-Ethylhexyl)phthalate	16	16	B	Negate	5
117-84-0	Di-n-octylphthalate	10		U		
205-99-2	Benzo(b)fluoranthene	10		U		
207-08-9	Benzo(k)fluoranthene	10		U		
50-32-8	Benzo(a)pyrene	10		U		
193-39-5	Indeno(1,2,3-cd)pyrene	10		U		
53-70-3	Dibenz(a,h)anthracene	10		U		
191-24-2	Benzo(g,h,i)perylene	10		U		

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-12

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB1RE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742R1

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: R292742R3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/02/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Method Blank Conc.	Q	Action FN
51-28-5	2,4-Dinitrophenol	28		U	
100-02-7	4-Nitrophenol	28		U	
132-64-9	Dibenzofuran	11		U	
121-14-2	2,4-Dinitrotoluene	11		U	
84-66-2	Diethylphthalate	11		U	
7005-72-3	4-Chlorophenyl-phenylether	11		U	
86-73-7	Fluorene	11		U	
100-01-6	4-Nitroaniline	28		U	
534-52-1	4,6-Dinitro-2-methylphenol	28		U	
86-30-6	N-nitrosodiphenylamine (1)	11		U	
101-55-3	4-Bromophenyl-phenylether	11		U	
118-74-1	Hexachlorobenzene	11		U	
87-86-5	Pentachlorophenol	28		U	
85-01-8	Phenanthrene	11		U	
120-12-7	Anthracene	11		U	
86-74-8	Carbazole	11		U	
84-74-2	Di-n-butylphthalate	11		U	
206-44-0	Fluoranthene	11		U	
129-00-0	Pyrene	11		U	
85-68-7	Butylbenzylphthalate	11		U	
91-94-1	3,3'-Dichlorobenzidine	11		U	
56-55-3	Benzo(a)anthracene	11		U	
218-01-9	Chrysene	11		U	
117-81-7	bis(2-Ethylhexyl)phthalate	4	2	JB	Negate 5
117-84-0	Di-n-octylphthalate	11		U	
205-99-2	Benzo(b)fluoranthene	11		U	
207-08-9	Benzo(k)fluoranthene	11		U	
50-32-8	Benzo(a)pyrene	11		U	
193-39-5	Indeno(1,2,3-cd)pyrene	11		U	
53-70-3	Dibenz(a,h)anthracene	11		U	
191-24-2	Benzo(g,h,i)perylene	11		U	

(1) - Cannot be separated from Diphenylamine

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292740

Sample wt/vol: 974.0 (g/mL) ML Lab File ID: Q292740I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 6

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

CAS NUMBER	COMPOUND NAME	RT	Method Blank EST. CONC.	Q	Action	FN
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.79	34 47	NJAB	Negate	5
2.	UNKNOWN POLYALKOXY ALCOHOL	20.18	4 3	JB	"	"
3.	UNKNOWN POLYALKOXY ALCOHOL	21.60	4 3	JB	Negate	5
4.	UNKNOWN POLYALKOXY ALCOHOL	21.96	9 5	JB	"	"
5.	UNKNOWN POLYALKOXY ALCOHOL	23.21	4 2	JB	Negate	5
6.	UNKNOWN SILOXANE	25.33	2 2	JB	"	"
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: MWB1RE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292742R1

Sample wt/vol: 900.0 (g/mL) ML Lab File ID: R292742R3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/02/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 4

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

CAS NUMBER	COMPOUND NAME	RT	Blank Conc. method EST. CONC.		Q	Action	FN
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	4.19	100	42	NJAB	Negate	5
2. 111-46-6	ETHANOL, 2,2'-OXYBIS-	5.78	3	3	NJB	"	5
3.	UNKNOWN ALIPHATIC COMPOUND	6.01		4	J	Qualify	2
4.	UNKNOWN POLYALKOXY ALCOHOL	19.39	2	3	JB	Negate	5
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FORM I SV-TIC OLM03.0

ATTACHMENT SS-15

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292743

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: P292743I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/28/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	Action FN
		Method Blank Conc.		
51-28-5	2,4-Dinitrophenol	27	U	
100-02-7	4-Nitrophenol	27	U	
132-64-9	Dibenzofuran	11	U	
121-14-2	2,4-Dinitrotoluene	11	U	
84-66-2	Diethylphthalate	11	U	
7005-72-3	4-Chlorophenyl-phenylether	11	U	
86-73-7	Fluorene	11	U	
100-01-6	4-Nitroaniline	27	U	
534-52-1	4,6-Dinitro-2-methylphenol	27	U	
86-30-6	N-nitrosodiphenylamine (1)	11	U	
101-55-3	4-Bromophenyl-phenylether	11	U	
118-74-1	Hexachlorobenzene	11	U	
87-86-5	Pentachlorophenol	27	U	
85-01-8	Phenanthrene	11	U	
120-12-7	Anthracene	11	U	
86-74-8	Carbazole	11	U	
84-74-2	Di-n-butylphthalate	11	U	
206-44-0	Fluoranthene	11	U	
129-00-0	Pyrene	11	U	
85-68-7	Butylbenzylphthalate	11	U	
91-94-1	3,3'-Dichlorobenzidine	11	U	
56-55-3	Benzo(a)anthracene	11	U	
218-01-9	Chrysene	11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	15 11	B	Negate 5
117-84-0	Di-n-octylphthalate	11	U	
205-99-2	Benzo(b)fluoranthene	11	U	
207-08-9	Benzo(k)fluoranthene	11	U	
50-32-8	Benzo(a)pyrene	11	U	
193-39-5	Indeno(1,2,3-cd)pyrene	11	U	
53-70-3	Dibenz(a,h)anthracene	11	U	
191-24-2	Benzo(g,h,i)perylene	11	U	

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-16

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292743

Sample wt/vol: 910.0 (g/mL) ML Lab File ID: P292743I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/28/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	Method Blank Conc. EST. CONC.	Q	Action	FN
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.46	36 40	NJAB	Negate	5
2.	UNKNOWN ALIPHATIC COMPOUND	13.37	5	J	Qualify	2
3.	UNKNOWN ALIPHATIC COMPOUND	13.95	5	J	↓	↓
4.	UNKNOWN ALIPHATIC COMPOUND	14.33	6	J	Negate	5
5.	UNKNOWN POLYALKOXY ALCOHOL	19.82	4 2	JB	↓	↓
6.	UNKNOWN POLYALKOXY ALCOHOL	21.24	4 5	JB	Qualify	2
7.	UNKNOWN POLYALKOXY ALCOHOL	21.58	8 4	JB	↓	↓
8.	UNKNOWN POLYCYCLIC HYDROCARB	25.58	7	J		
9.	UNKNOWN POLYCYCLIC HYDROCARB	27.25	5	J		
10.	UNKNOWN ALIPHATIC COMPOUND	28.11	5	J		
11.	UNKNOWN ALIPHATIC COMPOUND	28.24	9	J		
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MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	11	U
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	1	J
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	27	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	27	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	27	U
83-32-9	Acenaphthene	11	U

Action FN

Qualify 1

ATTACHMENT SS-18

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MWB5

Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

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

CAS NO.	COMPOUND	Method Blank conc.		Q	Action	FN
51-28-5	2,4-Dinitrophenol		27	U		
100-02-7	4-Nitrophenol		27	U		
132-64-9	Dibenzofuran		11	U		
121-14-2	2,4-Dinitrotoluene		11	U		
84-66-2	Diethylphthalate		11	U		
7005-72-3	4-Chlorophenyl-phenylether		11	U		
86-73-7	Fluorene		11	U		
100-01-6	4-Nitroaniline		27	U		
534-52-1	4,6-Dinitro-2-methylphenol		27	U		
86-30-6	N-nitrosodiphenylamine (1)		11	U		
101-55-3	4-Bromophenyl-phenylether		11	U		
118-74-1	Hexachlorobenzene		11	U		
87-86-5	Pentachlorophenol		27	U		
85-01-8	Phenanthrene		11	U		
120-12-7	Anthracene		11	U		
86-74-8	Carbazole		11	U		
84-74-2	Di-n-butylphthalate		11	U		
206-44-0	Fluoranthene		11	U		
129-00-0	Pyrene		11	U		
85-68-7	Butylbenzylphthalate		11	U		
91-94-1	3,3'-Dichlorobenzidine		11	U		
56-55-3	Benzo(a)anthracene		11	U		
218-01-9	Chrysene		11	U		
117-81-7	bis(2-Ethylhexyl)phthalate	10	12	B	Negate	5
117-84-0	Di-n-octylphthalate		11	U		
205-99-2	Benzo(b)fluoranthene		11	U		
207-08-9	Benzo(k)fluoranthene		11	U		
50-32-8	Benzo(a)pyrene		11	U		
193-39-5	Indeno(1,2,3-cd)pyrene		11	U		
53-70-3	Dibenz(a,h)anthracene		11	U		
191-24-2	Benzo(g,h,i)perylene		11	U		

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS

MWB5

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292744

Sample wt/vol: 912.0 (g/mL) ML Lab File ID: R292744I2S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	4.04	4	NJ
2. 95-36-3	BENZENE, 1,2,4-TRIMETHYL-	4.18	9	NJ
3. 526-73-8	BENZENE, 1,2,3-TRIMETHYL-	4.65	5	NJ
4.	UNKNOWN C4-ALKYLBENZENE	4.97	3	J
5.	UNKNOWN ALIPHATIC COMPOUND	5.00	3	J
6.	UNKNOWN AROMATIC COMPOUND	5.79	4	J
7.	UNKNOWN	7.33	3	J
8.	UNKNOWN	14.42	3	J
9.	UNKNOWN ALIPHATIC ACID ESTER	15.92	3	J
10.	UNKNOWN SILOXANE	18.75	3	J
11.	UNKNOWN SILOXANE	19.52	2	J
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
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Action EM
Qualify 2

FORM I SV-TIC OLM03.0

ATTACHMENT SS-19

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ2A

Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292745

Sample wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

Level: (low/med) LOW Date Received: 03/01/96

Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	11	U
111-44-4	bis(-2-Chloroethyl)Ether	11	U
95-57-8	2-Chlorophenol	11	U
541-73-1	1,3-Dichlorobenzene	11	U
106-46-7	1,4-Dichlorobenzene	11	U
95-50-1	1,2-Dichlorobenzene	11	U
95-48-7	2-Methylphenol	11	U
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U
106-44-5	4-Methylphenol	1	J
621-64-7	N-Nitroso-di-n-propylamine	11	U
67-72-1	Hexachloroethane	11	U
98-95-3	Nitrobenzene	11	U
78-59-1	Isophorone	11	U
88-75-5	2-Nitrophenol	11	U
105-67-9	2,4-Dimethylphenol	11	U
111-91-1	bis(2-Chloroethoxy)methane	11	U
120-83-2	2,4-Dichlorophenol	11	U
120-82-1	1,2,4-Trichlorobenzene	11	U
91-20-3	Naphthalene	11	U
106-47-8	4-Chloroaniline	11	U
87-68-3	Hexachlorobutadiene	11	U
59-50-7	4-Chloro-3-Methylphenol	11	U
91-57-6	2-Methylnaphthalene	11	U
77-47-4	Hexachlorocyclopentadiene	11	U
88-06-2	2,4,6-Trichlorophenol	11	U
95-95-4	2,4,5-Trichlorophenol	28	U
91-58-7	2-Chloronaphthalene	11	U
88-74-4	2-Nitroaniline	28	U
131-11-3	Dimethylphthalate	11	U
208-96-8	Acenaphthylene	11	U
606-20-2	2,6-Dinitrotoluene	11	U
99-09-2	3-Nitroaniline	28	U
83-32-9	Acenaphthene	11	U

Action EN

qualify 1

ATTACHMENT SS-20

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ2A

Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

b Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

trix: (soil/water) WATER Lab Sample ID: 292745

mple wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

evel: (low/med) LOW Date Received: 03/01/96

Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

oncentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

jection Volume: 2.0(uL) Dilution Factor: 1.0

PC Cleanup: (Y/N) N pH: ___

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

CAS NO.	COMPOUND	Method Blank conc.	Q	Action	FN
51-28-5	2,4-Dinitrophenol		28 U		
100-02-7	4-Nitrophenol		28 U		
132-64-9	Dibenzofuran		11 U		
121-14-2	2,4-Dinitrotoluene		11 U		
84-66-2	Diethylphthalate		11 U		
~~7005-72-3~~	~~4-Chlorophenyl-phenylether~~		11 U		
86-73-7	Fluorene		28 U		
100-01-6	4-Nitroaniline		28 U		
534-52-1	4,6-Dinitro-2-methylphenol		11 U		
86-30-6	N-nitrosodiphenylamine (1)		11 U		
101-55-3	4-Bromophenyl-phenylether		11 U		
118-74-1	Hexachlorobenzene		28 U		
87-86-5	Pentachlorophenol		11 U		
85-01-8	Phenanthrene		11 U		
120-12-7	Anthracene		11 U		
86-74-8	Carbazole		11 U		
84-74-2	Di-n-butylphthalate		11 U		
206-44-0	Fluoranthene		11 U		
129-00-0	Pyrene		11 U		
85-68-7	Butylbenzylphthalate		11 U		
91-94-1	3,3'-Dichlorobenzidine		11 U		
56-55-3	Benzo(a)anthracene		11 U		
218-01-9	Chrysene		11 U		
117-81-7	bis(2-Ethylhexyl)phthalate	10	1 JB	Negate	5
117-84-0	Di-n-octylphthalate		11 U		
205-99-2	Benzo(b)fluoranthene		11 U		
207-08-9	Benzo(k)fluoranthene		11 U		
50-32-8	Benzo(a)pyrene		11 U		
193-39-5	Indeno(1,2,3-cd)pyrene		11 U		
53-70-3	Dibenz(a,h)anthracene		11 U		
191-24-2	Benzo(g,h,i)perylene		11 U		

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-21

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ2A

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292745

Sample wt/vol: 887.0 (g/mL) ML Lab File ID: R292745S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N) ___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

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

CAS NO.	COMPOUND	Method Blank conc.		Q	Action	FN
51-28-5	2,4-Dinitrophenol		28	U		
100-02-7	4-Nitrophenol		28	U		
132-64-9	Dibenzofuran		11	U		
121-14-2	2,4-Dinitrotoluene		11	U		
84-66-2	Diethylphthalate		11	U		
7005-72-3	4-Chlorophenyl-phenylether		11	U		
86-73-7	Fluorene		11	U		
100-01-6	4-Nitroaniline		28	U		
534-52-1	4,6-Dinitro-2-methylphenol		28	U		
86-30-6	N-nitrosodiphenylamine (1)		11	U		
101-55-3	4-Bromophenyl-phenylether		11	U		
118-74-1	Hexachlorobenzene		11	U		
87-86-5	Pentachlorophenol		28	U		
85-01-8	Phenanthrene		11	U		
120-12-7	Anthracene		11	U		
86-74-8	Carbazole		11	U		
84-74-2	Di-n-butylphthalate		11	U		
206-44-0	Fluoranthene		11	U		
129-00-0	Pyrene		11	U		
85-68-7	Butylbenzylphthalate		11	U		
91-94-1	3,3'-Dichlorobenzidine		11	U		
56-55-3	Benzo(a)anthracene		11	U		
218-01-9	Chrysene		11	U		
117-81-7	bis(2-Ethylhexyl)phthalate	10	1	JB	Negate	5
117-84-0	Di-n-octylphthalate		11	U		
205-99-2	Benzo(b)fluoranthene		11	U		
207-08-9	Benzo(k)fluoranthene		11	U		
50-32-8	Benzo(a)pyrene		11	U		
193-39-5	Indeno(1,2,3-cd)pyrene		11	U		
53-70-3	Dibenz(a,h)anthracene		11	U		
191-24-2	Benzo(g,h,i)perylene		11	U		

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-21

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJ2A

: INCHCAPE ENVIRONMENTAL Contract: 95X22651

: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

(soil/water) WATER Lab Sample ID: 292745

t/vol: 887.0 (g/mL) ML Lab File ID: R292745S

(low/med) LOW Date Received: 03/01/96

re: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

rated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

n Volume: 2.0(uL) Dilution Factor: 1.0

anup: (Y/N) N pH: ___

TICs found: 30

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

NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	UNKNOWN ALIPHATIC COMPOUND	4.96	4	J
	UNKNOWN	5.05	3	J
	UNKNOWN	5.14	4	J
	UNKNOWN	5.34	5	J
	UNKNOWN ALIPHATIC COMPOUND	6.30	6	J
	UNKNOWN ALIPHATIC COMPOUND	6.54	6	J
	UNKNOWN ALIPHATIC COMPOUND	6.68	8	J
	UNKNOWN	6.86	8	J
	UNKNOWN ALIPHATIC COMPOUND	6.99	6	J
	UNKNOWN ALIPHATIC COMPOUND	7.12	4	J
	UNKNOWN ALIPHATIC COMPOUND	7.67	13	J
	UNKNOWN	7.81	8	J
	UNKNOWN	8.12	10	J
	UNKNOWN	8.30	6	J
	UNKNOWN	8.44	21	J
	UNKNOWN	9.09	13	J
	UNKNOWN	9.35	5	J
	UNKNOWN	9.64	8	J
	UNKNOWN	9.78	6	J
	UNKNOWN	9.91	10	J
	UNKNOWN AROMATIC COMPOUND	10.06	12	J
	UNKNOWN	10.38	7	J
	UNKNOWN	10.53	22	J
	UNKNOWN	10.76	15	J
	UNKNOWN	10.92	9	J
	UNKNOWN AROMATIC COMPOUND	11.08	13	J
	UNKNOWN	11.33	9	J
	UNKNOWN	12.53	12	J
	UNKNOWN	13.76	5	J
	UNKNOWN SILOXANE	18.76	7	J

Action / Qualify

FN / 2

FORM I SV-TIC OLM03.0

000570

ATTACHMENT SS-22

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292746

Sample wt/vol: 894.0 (g/mL) ML Lab File ID: R292746S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Method Blank conc.	Q	Action FN
51-28-5	2,4-Dinitrophenol		28	U	
100-02-7	4-Nitrophenol		28	U	
132-64-9	Dibenzofuran		11	U	
121-14-2	2,4-Dinitrotoluene		11	U	
84-66-2	Diethylphthalate		11	U	
7005-72-3	4-Chlorophenyl-phenylether		11	U	
86-73-7	Fluorene		11	U	
100-01-6	4-Nitroaniline		28	U	
534-52-1	4,6-Dinitro-2-methylphenol		28	U	
86-30-6	N-nitrosodiphenylamine (1)		11	U	
101-55-3	4-Bromophenyl-phenylether		11	U	
118-74-1	Hexachlorobenzene		11	U	
87-86-5	Pentachlorophenol		28	U	
85-01-8	Phenanthrene		11	U	
120-12-7	Anthracene		11	U	
86-74-8	Carbazole		11	U	
84-74-2	Di-n-butylphthalate		11	U	
206-44-0	Fluoranthene		11	U	
129-00-0	Pyrene		11	U	
85-68-7	Butylbenzylphthalate		11	U	
91-94-1	3,3'-Dichlorobenzidine		11	U	
56-55-3	Benzo(a)anthracene		11	U	
218-01-9	Chrysene		11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	10	3	JB	Negate 5
117-84-0	Di-n-octylphthalate		11	U	
205-99-2	Benzo(b)fluoranthene		11	U	
207-08-9	Benzo(k)fluoranthene		11	U	
50-32-8	Benzo(a)pyrene		11	U	
193-39-5	Indeno(1,2,3-cd)pyrene		11	U	
53-70-3	Dibenz(a,h)anthracene		11	U	
191-24-2	Benzo(g,h,i)perylene		11	U	

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-23

ATTACHMENT

1F
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJ7

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292746

Sample wt/vol: 894.0 (g/mL) ML Lab File ID: R292746S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

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

Number TICs found: 30

Action FN
Qualify R

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	5.41	4	J
2. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.47	5	NJ
3.	UNKNOWN C4-ALKYLBENZENE W/UN	5.51	5	JZ
4. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.61	6	NJZ
5.	UNKNOWN SUBSTITUTED BENZENE	5.80	5	JZ
6.	UNKNOWN	6.04	7	J
7.	UNKNOWN AROMATIC COMPOUND	6.15	5	J
8.	UNKNOWN NAPHTHALENE DERIVATI	6.40	4	J
9.	UNKNOWN ALIPHATIC COMPOUND	6.45	3	J
10.	UNKNOWNS	6.52	6	JZ
11.	UNKNOWN	6.58	4	J
12.	UNKNOWN ALIPHATIC COMPOUND	6.81	4	J
13.	UNKNOWN	6.87	3	J
14.	UNKNOWN AROMATIC COMPOUND	6.90	3	J
15.	UNKNOWN ALIPHATIC COMPOUND	6.95	7	J
16.	UNKNOWN	7.17	4	J
17.	UNKNOWN	7.36	4	J
18.	UNKNOWN	7.40	8	J
19.	UNKNOWN	7.52	9	J
20.	UNKNOWN ALIPHATIC COMPOUND	7.66	11	J
21.	UNKNOWN	7.81	10	J
22.	UNKNOWN	7.99	4	J
23.	UNKNOWN ALIPHATIC COMPOUND	8.07	6	J
24.	UNKNOWN ALIPHATIC COMPOUND	8.14	30	J
25.	UNKNOWN ALIPHATIC COMPOUND	8.40	4	J
26.	UNKNOWN ALIPHATIC COMPOUND	8.47	24	J
27.	UNKNOWN ALIPHATIC COMPOUND W	9.22	6	JZ
28.	UNKNOWN	9.34	8	J
29.	UNKNOWN AROMATIC COMPOUND	10.74	4	J
30.	UNKNOWN POLYALKOXY ALCOHOL	14.29	12	J

OLM03.0

FORM I SV-TIC

ATTACHMENT SS-24

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747

Sample wt/vol: 906.0 (g/mL) ML Lab File ID: Q292747I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Method Blank Conc.	Q	Action FN
51-28-5	2,4-Dinitrophenol	28		U	
100-02-7	4-Nitrophenol	28		U	
132-64-9	Dibenzofuran	11		U	
121-14-2	2,4-Dinitrotoluene	11		U	
84-66-2	Diethylphthalate	11		U	
7005-72-3	4-Chlorophenyl-phenylether	11		U	
86-73-7	Fluorene	11		U	
100-01-6	4-Nitroaniline	28		U	
534-52-1	4,6-Dinitro-2-methylphenol	28		U	
86-30-6	N-nitrosodiphenylamine (1)	11		U	
101-55-3	4-Bromophenyl-phenylether	11		U	
118-74-1	Hexachlorobenzene	11		U	
87-86-5	Pentachlorophenol	28		U	
85-01-8	Phenanthrene	11		U	
120-12-7	Anthracene	11		U	
86-74-8	Carbazole	11		U	
84-74-2	Di-n-butylphthalate	11		U	
206-44-0	Fluoranthene	11		U	
129-00-0	Pyrene	11		U	
85-68-7	Butylbenzylphthalate	11		U	
91-94-1	3,3'-Dichlorobenzidine	11		U	
56-55-3	Benzo(a)anthracene	11		U	
218-01-9	Chrysene	11		U	
117-81-7	bis(2-Ethylhexyl)phthalate	2	16	JB	Negate 5
117-84-0	Di-n-octylphthalate	11		U	
205-99-2	Benzo(b)fluoranthene	11		U	
207-08-9	Benzo(k)fluoranthene	11		U	
50-32-8	Benzo(a)pyrene	11		U	
193-39-5	Indeno(1,2,3-cd)pyrene	11		U	
53-70-3	Dibenz(a,h)anthracene	11		U	
191-24-2	Benzo(g,h,i)perylene	11		U	

(1) - Cannot be separated from Diphenylamine

ATTACHMENT 55-25

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJ9

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747

Sample wt/vol: 906.0 (g/mL) ML Lab File ID: Q292747I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

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

Number TICs found: 29

Method Blank

CAS NUMBER	COMPOUND NAME	RT	Conc. EST. CONC.	Q	Action FN
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.78	34 26	NJAB	negate 5
2.	UNKNOWN SUBSTITUTED BENZENE	11.10	3	J	Qualify 2
3.	UNKNOWN ALIPHATIC COMPOUND	12.03	3	J	
4.	UNKNOWN	12.43	2	J	
5.	UNKNOWN	13.25	3	J	
6.	UNKNOWN	13.41	3	J	
7.	UNKNOWN	13.51	2	J	
8.	UNKNOWN	13.54	3	J	
9.	UNKNOWN	13.68	3	J	
10.	UNKNOWN	14.06	6	J	
11.	UNKNOWN	14.31	4	J	
12.	UNKNOWN SILOXANE	14.53	2	J	
13.	UNKNOWN	14.69	6	J	
14.	UNKNOWN	14.89	3	J	
15.	UNKNOWN ALIPHATIC COMPOUND	15.06	2	J	
16.	UNKNOWN	15.27	3	J	
17.	UNKNOWN	15.80	4	J	
18.	UNKNOWN	15.85	2	J	
19.	UNKNOWN	16.02	3	J	
20.	UNKNOWN SILOXANE	16.12	2	J	
21.	UNKNOWN	16.30	4	J	
22.	UNKNOWN ALIPHATIC COMPOUND	16.37	3	J	
23.	UNKNOWN	16.93	4	J	
24.	UNKNOWN ALIPHATIC COMPOUND	17.12	4	J	
25.	UNKNOWN	17.29	3	J	
26.	UNKNOWN	17.41	3	J	
27.	UNKNOWN SILOXANE	17.48	3	J	
28.	UNKNOWN SILOXANE	23.37	2	J	
29.	UNKNOWN SILOXANE	24.28	2	J	
30.					

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ9RE

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292747R1

Sample wt/vol: 930.0 (g/mL) ML Lab File ID: R292747R3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 04/02/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 04/05/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	Action FN
51-28-5	2,4-Dinitrophenol	27	U	
100-02-7	4-Nitrophenol	27	U	
132-64-9	Dibenzofuran	11	U	
121-14-2	2,4-Dinitrotoluene	11	U	
84-66-2	Diethylphthalate	11	U	
7005-72-3	4-Chlorophenyl-phenylether	11	U	
86-73-7	Fluorene	11	U	
100-01-6	4-Nitroaniline	27	U	
534-52-1	4,6-Dinitro-2-methylphenol	27	U	
86-30-6	N-nitrosodiphenylamine (1)	11	U	
101-55-3	4-Bromophenyl-phenylether	11	U	
118-74-1	Hexachlorobenzene	11	U	
87-86-5	Pentachlorophenol	27	U	
85-01-8	Phenanthrene	11	U	
120-12-7	Anthracene	11	U	
86-74-8	Carbazole	11	U	
84-74-2	Di-n-butylphthalate	11	U	
206-44-0	Fluoranthene	11	U	
129-00-0	Pyrene	11	U	
85-68-7	Butylbenzylphthalate	11	U	
91-94-1	3,3'-Dichlorobenzidine	11	U	
56-55-3	Benzo(a)anthracene	11	U	
218-01-9	Chrysene	11	U	
117-81-7	bis(2-Ethylhexyl)phthalate	2 5	JB	Negate 5
117-84-0	Di-n-octylphthalate	11	U	
205-99-2	Benzo(b)fluoranthene	11	U	
207-08-9	Benzo(k)fluoranthene	11	U	
50-32-8	Benzo(a)pyrene	11	U	
193-39-5	Indeno(1,2,3-cd)pyrene	11	U	
53-70-3	Dibenz(a,h)anthracene	11	U	
191-24-2	Benzo(g,h,i)perylene	11	U	

(1) - Cannot be separated from Diphenylamine

OLM03.0

FORM I SV-2

ATTACHMENT SS-27

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

NJ9RE

INCHCAPE ENVIRONMENTAL Contract: 95X22651

: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

soil/water) WATER Lab Sample ID: 292747R1

t/vol: 930.0 (g/mL) ML Lab File ID: R292747R3S

(low/med) LOW Date Received: 03/01/96

re: _____ decanted: (Y/N)___ Date Extracted: 04/02/96

ated Extract Volume: 1000 (uL) Date Analyzed: 04/05/96

Volume: 2.0 (uL) Dilution Factor: 1.0

nup: (Y/N) N pH: ___

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

ICs found: 30

Method Blank conc.

MBER	COMPOUND NAME	RT	EST. CONC.	Q
3-42-2	2-PENTANONE, 4-HYDROXY-4-MET	4.19	100 31	NJAB
	UNKNOWN ALIPHATIC COMPOUND	6.27	3	J
	UNKNOWN ALIPHATIC COMPOUND	8.05	4	J
	UNKNOWN ALIPHATIC COMPOUND	8.51	5	J
	UNKNOWN ALIPHATIC COMPOUND	8.58	4	J
	UNKNOWN SILANE DERIVATIVE	8.86	4	J
	UNKNOWN SILANE DERIVATIVE	9.04	4	J
	UNKNOWN ALIPHATIC COMPOUND	9.45	6	J
	UNKNOWN ALIPHATIC COMPOUND	9.65	4	J
	UNKNOWN ALIPHATIC COMPOUND	9.74	4	J
	UNKNOWN ALIPHATIC COMPOUND	9.90	7	J
	UNKNOWN ALIPHATIC COMPOUND	9.98	6	J
	UNKNOWN ALIPHATIC COMPOUND	10.35	3	J
	UNKNOWN ALIPHATIC COMPOUND	10.49	3	J
	UNKNOWN	10.78	5	J
	UNKNOWN	10.87	4	J
	UNKNOWN SILOXANE	10.96	5	J
	UNKNOWN ALIPHATIC COMPOUND	11.03	3	J
	UNKNOWN ALIPHATIC COMPOUND	11.12	5	J
	UNKNOWN	11.17	4	J
	UNKNOWN ALIPHATIC COMPOUND	11.24	3	J
	UNKNOWN ALIPHATIC COMPOUND	11.35	5	J
	UNKNOWN ALIPHATIC COMPOUND	11.56	6	J
	UNKNOWN	11.86	4	J
	UNKNOWN	12.12	6	J
	UNKNOWN	12.32	5	J
	UNKNOWN	12.69	5	J
	UNKNOWN SUBSTITUTED BENZENE	13.05	4	J
	UNKNOWN	15.62	3	J
	UNKNOWN AMIDE	22.10	4	J

Action: Negate Qualify

FN: 5, 2, 28

FORM I SV-TIC OLM03.0

000722

ATTACHMENT SS-28

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	22	U
111-44-4	bis(-2-Chloroethyl)Ether	22	U
95-57-8	2-Chlorophenol	22	U
541-73-1	1,3-Dichlorobenzene	22	U
106-46-7	1,4-Dichlorobenzene	22	U
95-50-1	1,2-Dichlorobenzene	22	U
95-48-7	2-Methylphenol	22	U
108-60-1	2,2'-oxybis(1-Chloropropane)	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
120-82-1	1,2,4-Trichlorobenzene	22	U
91-20-3	Naphthalene	22	
106-47-8	4-Chloroaniline	22	U
87-68-3	Hexachlorobutadiene	22	U
59-50-7	4-Chloro-3-Methylphenol	22	U
91-57-6	2-Methylnaphthalene	16	J
77-47-4	Hexachlorocyclopentadiene	22	U
88-06-2	2,4,6-Trichlorophenol	22	U
95-95-4	2,4,5-Trichlorophenol	54	U
91-58-7	2-Chloronaphthalene	22	U
88-74-4	2-Nitroaniline	54	U
131-11-3	Dimethylphthalate	22	U
208-96-8	Acenaphthylene	22	U
606-20-2	2,6-Dinitrotoluene	22	U
99-09-2	3-Nitroaniline	54	U
83-32-9	Acenaphthene	22	U

Action FN

Qualify 24

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/15/96

Injection Volume: 2.0 (uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L Method Blank Conc.	Q	Action FN
51-28-5	2,4-Dinitrophenol	54	U	
100-02-7	4-Nitrophenol	54	U	
132-64-9	Dibenzofuran	4	J	Qualify 24
121-14-2	2,4-Dinitrotoluene	22	U	
84-66-2	Diethylphthalate	22	U	
7005-72-3	4-Chlorophenyl-phenylether	22	U	
86-73-7	Fluorene	7	J	Qualify 24
100-01-6	4-Nitroaniline	54	U	
534-52-1	4,6-Dinitro-2-methylphenol	54	U	
86-30-6	N-nitrosodiphenylamine (1)	22	U	
101-55-3	4-Bromophenyl-phenylether	22	U	
118-74-1	Hexachlorobenzene	22	U	
87-86-5	Pentachlorophenol	54	U	
85-01-8	Phenanthrene	8	J	Qualify 24
120-12-7	Anthracene	22	U	
86-74-8	Carbazole	22	U	
84-74-2	Di-n-butylphthalate	22	U	
206-44-0	Fluoranthene	1	J	Qualify 24
129-00-0	Pyrene	2	J	24
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	3	J	Qualify 24
117-81-7	bis(2-Ethylhexyl)phthalate	10 3	JB	Negate 5
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	Dibenz(a,h)anthracene	22	U	
191-24-2	Benzo(g,h,i)perylene	22	U	

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS

NJ12

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292748

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: R292748DS

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/15/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 16

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 95-36-3	BENZENE, 1,2,4-TRIMETHYL- W/	4.35	150	NJZ
2.	UNKNOWN C4-ALKYLBENZENE	5.53	8	J
3. 2958-76-1	NAPHTHALENE, DECAHYDRO-2-MET	5.62	11	NJ
4.	UNKNOWN SUBSTITUTED BENZENES	5.72	10	JZ
5.	UNKNOWN SUBSTITUTED BENZENES	5.81	9	JZ
6.	UNKNOWN	6.35	8	J
7.	UNKNOWN ALIPHATIC COMPOUND	6.57	9	J
8. 90-12-0	NAPHTHALENE, 1-METHYL-	7.20	32	NJ
9.	UNKNOWN ALIPHATIC COMPOUND	7.37	14	J
10.	UNKNOWN DIMETHYLNAPHTHALENE	7.98	50	J
11.	UNKNOWN DIMETHYLNAPHTHALENE	8.15	97	J
12.	UNKNOWN DIMETHYLNAPHTHALENE	8.30	35	J
13.	UNKNOWN ALIPHATIC COMPOUND	8.48	58	J
14.	UNKNOWN C3-ALKYLNAPHTHALENE	9.11	66	JZ
15.	UNKNOWN C3-ALKYLNAPHTHALENE	9.29	24	J
16.	UNKNOWN	9.36	28	J
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Action EN
Qualify 2

FORM I SV-TIC OLM03.0

000763

ATTACHMENT SS-31

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q	Action FN
108-95-2	Phenol	11	U	
111-44-4	bis(-2-Chloroethyl)Ether	11	U	
95-57-8	2-Chlorophenol	11	U	
541-73-1	1,3-Dichlorobenzene	11	U	
106-46-7	1,4-Dichlorobenzene	11	U	
95-50-1	1,2-Dichlorobenzene	11	U	
95-48-7	2-Methylphenol	11	U	
108-60-1	2,2'-oxybis(1-Chloropropane)	11	U	
106-44-5	4-Methylphenol	11	U	
621-64-7	N-Nitroso-di-n-propylamine	11	U	
67-72-1	Hexachloroethane	11	U	
98-95-3	Nitrobenzene	11	U	
78-59-1	Isophorone	11	U	
88-75-5	2-Nitrophenol	11	U	
105-67-9	2,4-Dimethylphenol	11	U	
111-91-1	bis(2-Chloroethoxy)methane	11	U	
120-83-2	2,4-Dichlorophenol	11	U	
120-82-1	1,2,4-Trichlorobenzene	11	U	
91-20-3	Naphthalene	11	U	
106-47-8	4-Chloroaniline	11	U	
87-68-3	Hexachlorobutadiene	11	U	
59-50-7	4-Chloro-3-Methylphenol	10	J	Qualify 1
91-57-6	2-Methylnaphthalene	11	U	
77-47-4	Hexachlorocyclopentadiene	11	U	
88-06-2	2,4,6-Trichlorophenol	27	U	
95-95-4	2,4,5-Trichlorophenol	11	U	
91-58-7	2-Chloronaphthalene	27	U	
88-74-4	2-Nitroaniline	11	U	
131-11-3	Dimethylphthalate	11	U	
208-96-8	Acenaphthylene	11	U	
606-20-2	2,6-Dinitrotoluene	27	U	
99-09-2	3-Nitroaniline	1	J	Qualify 1
83-32-9	Acenaphthene			

FORM I SV-1 OLM03.0

ATTACHMENT SS-32

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Method Blank conc.	Q	Action	FN
51-28-5	2,4-Dinitrophenol	27		U		
100-02-7	4-Nitrophenol	27		U		
132-64-9	Dibenzofuran	1		J	Qualify	1
121-14-2	2,4-Dinitrotoluene	11		U		
84-66-2	Diethylphthalate	11		U		
7005-72-3	4-Chlorophenyl-phenylether	11		U		
86-73-7	Fluorene	2		J	Qualify	1
100-01-6	4-Nitroaniline	27		U		
534-52-1	4,6-Dinitro-2-methylphenol	27		U		
86-30-6	N-nitrosodiphenylamine (1)	11		U		
101-55-3	4-Bromophenyl-phenylether	11		U		
118-74-1	Hexachlorobenzene	11		U		
87-86-5	Pentachlorophenol	27		U		
85-01-8	Phenanthrene	2		J	Qualify	1
120-12-7	Anthracene	11		U		
86-74-8	Carbazole	11		U		
84-74-2	Di-n-butylphthalate	1	1	JB	Negate	5
206-44-0	Fluoranthene	11		U		
129-00-0	Pyrene	11		U		
85-68-7	Butylbenzylphthalate	11		U		
91-94-1	3,3'-Dichlorobenzidine	11		U		
56-55-3	Benzo(a)anthracene	11		U		
218-01-9	Chrysene	11		U		
117-81-7	bis(2-Ethylhexyl)phthalate	16	3	JB	Negate	5
117-84-0	Di-n-octylphthalate	11		U		
205-99-2	Benzo(b)fluoranthene	11		U		
207-08-9	Benzo(k)fluoranthene	11		U		
50-32-8	Benzo(a)pyrene	11		U		
193-39-5	Indeno(1,2,3-cd)pyrene	11		U		
53-70-3	Dibenz(a,h)anthracene	11		U		
191-24-2	Benzo(g,h,i)perylene	11		U		

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS-33

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292749

Sample wt/vol: 925.0 (g/mL) ML Lab File ID: Q292749I4S

Level: (low/med) LOW Date Received: 03/01/96

Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 03/30/96

Injection Volume: 2.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

CAS NUMBER	COMPOUND NAME	RT	Method Blank Conc. EST. CONC.	Q	Action	FN
1. 75-85-4	AMYLENE HYDRATE	4.10	9	NJ	Qualify	2
2. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.80	34 42	NJAB	Negate	5
3. 98-82-8	BENZENE, (1-METHYLETHYL)-	8.00	7	NJ	Qualify	2
4. 103-65-1	BENZENE, PROPYL-	8.42	9	NJ		
5.	UNKNOWN C4-ALKYLBENZENE	9.71	6	J		
6.	UNKNOWN C4-SUBSTITUTED BENZE	10.20	12	JZ		
7.	UNKNOWN	10.50	5	J		
8.	UNKNOWN C4-ALKYLBENZENE	10.62	10	J		
9.	UNKNOWN INDENE DERIVATIVE	10.95	9	J		
10.	UNKNOWN C4-SUBSTITUTED BENZE	11.11	21	JZ		
11.	UNKNOWN INDENE DERIVATIVE	11.68	5	J		
12.	UNKNOWN	11.93	5	J		
13.	UNKNOWN	12.50	8	J		
14.	UNKNOWN	12.65	7	J		
15. 90-12-0	NAPHTHALENE, 1-METHYL-	13.14	30	NJ		
16.	UNKNOWN	13.20	5	J		
17.	UNKNOWN	13.36	9	J		
18.	UNKNOWN	13.52	8	J		
19.	UNKNOWN	13.74	8	J		
20.	UNKNOWN	13.93	5	J		
21.	UNKNOWN DIMETHYLNAPHTHALENE	14.13	12	J		
22.	UNKNOWN DIMETHYLNAPHTHALENE	14.29	22	J		
23.	UNKNOWN DIMETHYLNAPHTHALENE	14.53	6	J		
24.	UNKNOWN DIMETHYLNAPHTHALENE	14.68	7	J		
25.	UNKNOWN	15.32	5	J		
26.	UNKNOWNS W/DIBENZOFURAN	15.35	5	JZ		
27.	UNKNOWN C3-ALKYLNAPHTHALENE	15.42	8	JZ		
28.	UNKNOWN	16.39	12	J		
29.	UNKNOWN	16.83	6	J		
30.	UNKNOWN ALIPHATIC COMPOUND	20.24	8	J		

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292750

Sample wt/vol: 931.0 (g/mL) ML Lab File ID: R292750S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

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

CAS NO.	COMPOUND	Method Blank Conc.		Q	Action	FN
51-28-5	2,4-Dinitrophenol		27	U		
100-02-7	4-Nitrophenol		27	U		
132-64-9	Dibenzofuran		11	U		
121-14-2	2,4-Dinitrotoluene		11	U		
84-66-2	Diethylphthalate		11	U		
7005-72-3	4-Chlorophenyl-phenylether		11	U		
86-73-7	Fluorene		11	U		
100-01-6	4-Nitroaniline		27	U		
534-52-1	4,6-Dinitro-2-methylphenol		27	U		
86-30-6	N-nitrosodiphenylamine (1)		11	U		
101-55-3	4-Bromophenyl-phenylether		11	U		
118-74-1	Hexachlorobenzene		11	U		
87-86-5	Pentachlorophenol		27	U		
85-01-8	Phenanthrene		11	U		
120-12-7	Anthracene		11	U		
86-74-8	Carbazole		11	U		
84-74-2	Di-n-butylphthalate		11	U		
206-44-0	Fluoranthene		11	U		
129-00-0	Pyrene		11	U		
85-68-7	Butylbenzylphthalate		11	U		
91-94-1	3,3'-Dichlorobenzidine		11	U		
56-55-3	Benzo(a)anthracene		11	U		
218-01-9	Chrysene		11	U		
117-81-7	bis(2-Ethylhexyl)phthalate	10	2	JB	Negate	5
117-84-0	Di-n-octylphthalate		11	U		
205-99-2	Benzo(b)fluoranthene		11	U		
207-08-9	Benzo(k)fluoranthene		11	U		
50-32-8	Benzo(a)pyrene		11	U		
193-39-5	Indeno(1,2,3-cd)pyrene		11	U		
53-70-3	Dibenz(a,h)anthracene		11	U		
191-24-2	Benzo(g,h,i)perylene		11	U		

(1) - Cannot be separated from Diphenylamine

ATTACHMENT SS35

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292750

Sample wt/vol: 931.0 (g/mL) ML Lab File ID: R292750S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/16/96

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q	Action Qualify	FN 2
1. 108-67-8	BENZENE, 1,3,5-TRIMETHYL-	3.96	5	NJ		
2. 95-36-3	1,2,4-TRIMETHYLBENZENE	4.19	6	NJ		
3.	UNKNOWN C4-ALKYLBENZENE	4.89	4	J		
4.	UNKNOWN C4-ALKYLBENZENE	5.16	3	J		
5.	UNKNOWN C4-ALKYLBENZENE	5.49	3	J		
6.	UNKNOWN C4-ALKYLBENZENE	5.53	4	J		
7.	UNKNOWN SUBSTITUTED BENZENES	5.81	4	JZ		
8.	UNKNOWN SILOXANE	16.04	2	J		
9.	UNKNOWN	16.36	2	J		
10.	UNKNOWN SILOXANE	16.43	2	J		
11.	UNKNOWN SILOXANE	18.74	4	J		
12.	UNKNOWN SILOXANE	19.51	2	J		
13.						
14.						
15.						
16.						
17.						
18.						
19.						
20.						
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23.						
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FORM I SV-TIC OLM03.0

ATTACHMENT SS-36

000921
ATTACHMENT

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Action FN

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	21	U
111-44-4	bis(-2-Chloroethyl)Ether	21	U
95-57-8	2-Chlorophenol	21	U
541-73-1	1,3-Dichlorobenzene	21	U
106-46-7	1,4-Dichlorobenzene	21	U
95-50-1	1,2-Dichlorobenzene	21	U
95-48-7	2-Methylphenol	21	U
108-60-1	2,2'-oxybis(1-Chloropropane)	21	U
106-44-5	4-Methylphenol	21	U
621-64-7	N-Nitroso-di-n-propylamine	21	U
67-72-1	Hexachloroethane	21	U
98-95-3	Nitrobenzene	21	U
78-59-1	Isophorone	21	U
88-75-5	2-Nitrophenol	21	U
105-67-9	2,4-Dimethylphenol	21	U
111-91-1	bis(2-Chloroethoxy)methane	21	U
120-83-2	2,4-Dichlorophenol	21	U
120-82-1	1,2,4-Trichlorobenzene	21	U
91-20-3	Naphthalene	21	U
106-47-8	4-Chloroaniline	21	U
87-68-3	Hexachlorobutadiene	21	U
59-50-7	4-Chloro-3-Methylphenol	21	U
91-57-6	2-Methylnaphthalene	2	J
77-47-4	Hexachlorocyclopentadiene	21	U
88-06-2	2,4,6-Trichlorophenol	21	U
95-95-4	2,4,5-Trichlorophenol	53	U
91-58-7	2-Chloronaphthalene	21	U
88-74-4	2-Nitroaniline	53	U
131-11-3	Dimethylphthalate	21	U
208-96-8	Acenaphthylene	21	U
606-20-2	2,6-Dinitrotoluene	21	U
99-09-2	3-Nitroaniline	53	U
83-32-9	Acenaphthene	21	U

Qualify 24

FORM I SV-1 OLM03.0

ATTACHMENT SS-37

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

NJ15

Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

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

CAS NO.	COMPOUND	Method Blank Conc.	Q	Action	FN
51-28-5	2,4-Dinitrophenol	53	U		
100-02-7	4-Nitrophenol	53	U		
132-64-9	Dibenzofuran	21	U		
121-14-2	2,4-Dinitrotoluene	21	U		
84-66-2	Diethylphthalate	21	U		
7005-72-3	4-Chlorophenyl-phenylether	21	U		
86-73-7	Fluorene	21	U		
100-01-6	4-Nitroaniline	53	U		
534-52-1	4,6-Dinitro-2-methylphenol	53	U		
86-30-6	N-nitrosodiphenylamine (1)	21	U		
101-55-3	4-Bromophenyl-phenylether	21	U		
118-74-1	Hexachlorobenzene	21	U		
87-86-5	Pentachlorophenol	53	U		
85-01-8	Phenanthrene	11	J	Qualify 24	
120-12-7	Anthracene	21	U		
86-74-8	Carbazole	21	U		
84-74-2	Di-n-butylphthalate	21	U		
206-44-0	Fluoranthene	21	U		
129-00-0	Pyrene	2	J	Qualify 24	
85-68-7	Butylbenzylphthalate	21	U		
91-94-1	3,3'-Dichlorobenzidine	21	U		
56-55-3	Benzo(a)anthracene	21	U		
218-01-9	Chrysene	2	J	Qualify 24	
117-81-7	bis(2-Ethylhexyl)phthalate	3	JB	Negate 5	
117-84-0	Di-n-octylphthalate	21	U		
205-99-2	Benzo(b)fluoranthene	21	U		
207-08-9	Benzo(k)fluoranthene	21	U		
50-32-8	Benzo(a)pyrene	21	U		
193-39-5	Indeno(1,2,3-cd)pyrene	21	U		
53-70-3	Dibenz(a,h)anthracene	21	U		
191-24-2	Benzo(g,h,i)perylene	21	U		

16

(1) - Cannot be separated from Diphenylamine

OLM03.0

FORM I SV-2

ATTACHMENT SS-38

TENTATIVELY IDENTIFIED COMPOUNDS

NJ15

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) WATER Lab Sample ID: 292751

Sample wt/vol: 942.0 (g/mL) ML Lab File ID: Q292751D3S

Level: (low/med) LOW Date Received: 03/01/96

% Moisture: _____ decanted: (Y/N)___ Date Extracted: 03/06/96

Concentrated Extract Volume: 1000(uL) Date Analyzed: 03/30/96

Injection Volume: 2.0(uL) Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: ___

Number TICs found: 30

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

Method Blank Conc.

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 123-42-2	2-PENTANONE, 4-HYDROXY-4-MET	6.79	34 28	NJAB
2. 611-14-3	BENZENE, 1-ETHYL-2-METHYL- W	8.79	18	NJZ
3.	UNKNOWN W/2-CHLOROPHENOL-D4	8.99	21	JZ
4.	UNKNOWN C4-ALKYLBENZENE	9.71	17	J
5. 493-02-7	NAPHTHALENE, DECAHYDRO-, TRA	9.90	20	NJ
6.	UNKNOWN C4-ALKYLBENZENE	10.20	24	J
7.	UNKNOWN C4-ALKYLBENZENE W/UN	10.62	22	JZ
8.	UNKNOWN NAPHTHALENE DERIVATI	10.85	21	J
9.	UNKNOWN SUBSTITUTED BENZENES	11.13	26	JZ
10.	UNKNOWN ALIPHATIC COMPOUND	11.49	16	J
11.	UNKNOWN	11.93	24	J
12.	UNKNOWN NAPHTHALENE DERIVATI	12.53	22	J
13.	UNKNOWN W/1-METHYLNAPHTHALEN	13.15	32	JZ
14. 90-12-0	NAPHTHALENE, 1-METHYL-	13.18	33	NJ
15.	UNKNOWN NAPHTHALENE DERIVATI	13.75	110	J
16.	UNKNOWN DIMETHYLNAPHTHALENE	14.17	94	J
17.	UNKNOWN DIMETHYLNAPHTHALENE	14.32	270	JZ
18.	UNKNOWN ALIPHATIC COMPOUND	14.74	120	J
19.	UNKNOWN	15.14	42	J
20.	UNKNOWN C3-ALKYLNAPHTHALENE	15.40	74	J
21.	UNKNOWN C3-ALKYLNAPHTHALENE	15.47	50	J
22.	UNKNOWN C3-ALKYLNAPHTHALENE	15.63	52	J
23.	UNKNOWN	18.71	16	J
24.	UNKNOWN METHYLPHENANTHRENE W	19.13	50	JZ
25.	UNKNOWN	19.47	26	J
26.	UNKNOWN DIMETHYLPHENANTHRENE	19.99	40	J
27.	UNKNOWN POLYCYCLIC HYDROCARB	21.72	18	J
28.	UNKNOWN ALIPHATIC COMPOUND	25.68	19	J
29.	UNKNOWN POLYCYCLIC HYDROCARB	28.27	21	J
30.	UNKNOWN POLYCYCLIC HYDROCARB	29.39	18	J

Action EN
Negate 5
Qualify 2

FORM I SV-TIC

OLM03.0

000961

ATTACHMENT SS-39

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

FB1

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292740

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	
		Qualifier/MBconc.				Action
7429-90-5	Aluminum	J 52.6	B		P	Qualify 19
7440-36-0	Antimony	2.5	U		P	
7440-38-2	Arsenic	J 2.8	U		P	Qualify 14
7440-39-3	Barium	5.4	U		P	
7440-41-7	Beryllium	0.10	U		P	
7440-43-9	Cadmium	0.30	U		P	
7440-70-2	Calcium	143	U		P	
7440-47-3	Chromium	0.60	U		P	
7440-48-4	Cobalt	1.4	U		P	
7440-50-8	Copper	1.0	U		P	
7439-89-6	Iron	J 19.7 74.8	B		P	Qualify 3
7439-92-1	Lead	J 1.6	U		P	Qualify 14
7439-95-4	Magnesium	137	U		P	
7439-96-5	Manganese	J 1.4	B		P	Qualify 19
7439-97-6	Mercury	0.10	U		CV	
7440-02-0	Nickel	1.4	U		P	
7440-09-7	Potassium	136	U		P	
7782-49-2	Selenium	J 2.2	U		P	Qualify 11, 14
7440-22-4	Silver	0.70	U		P	
7440-23-5	Sodium	187	U		P	
7440-28-0	Thallium	J 2.3	U		P	Qualify 14
7440-62-2	Vanadium	1.6	U		P	
7440-66-6	Zinc	J 7.0	B	E	P	Qualify 18, 19
	Cyanide	--- 5.0	U	N	AS	Reject 15

Color Before: BROWN Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN

ILM03.0

ATTACHMENT 55-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

BEC2D

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292739

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	Action	FN
		Qualifier, Method Blank conc.					
7429-90-5	Aluminum_	J 73.0	B		P_	Negate	20
7440-36-0	Antimony_	2.5	U		P_		
7440-38-2	Arsenic__	J 2.8	U		P_	Qualify	14
7440-39-3	Barium___	303			P_		
7440-41-7	Beryllium	0.10	U		P_		
7440-43-9	Cadmium__	0.30	U		P_		
7440-70-2	Calcium__	52100			P_		
7440-47-3	Chromium_	J 0.90	B		P_	Qualify	19
7440-48-4	Cobalt___	1.4	U		P_		
7440-50-8	Copper___	J 1.8	B		P_	Qualify	19
7439-89-6	Iron_____	19.7 16100			P_		
7439-92-1	Lead_____	J 1.6	U		P_	Qualify	14
7439-95-4	Magnesium	8020			P_		
7439-96-5	Manganese	1160			P_		
7439-97-6	Mercury__	0.10	U		CV		
7440-02-0	Nickel___	J 3.0	B		P_	Qualify	19
7440-09-7	Potassium	J 4910	B		P_	Qualify	19
7782-49-2	Selenium_	J 2.2	U		P_	Qualify	11,14
7440-22-4	Silver___	0.70	U		P_		
7440-23-5	Sodium___	79500			P_		
7440-28-0	Thallium_	J 2.3	U		P_	Qualify	14
7440-62-2	Vanadium_	1.6	U		P_		
7440-66-6	Zinc_____	J 145		E	P_	Qualify	18
	Cyanide__	--- 5.0	U	N	AS	Reject	15

Color Before: WHITE____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT SS-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB1

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292742

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	Qualifier, Method	C	Q Blank conc.	M	Action	FN
7429-90-5	Aluminum_	7180				P_		
7440-36-0	Antimony_	2.5		U		P_		
7440-38-2	Arsenic__	3.2	J	B		P_	Qualify	14,19
7440-39-3	Barium___	402				P_		
7440-41-7	Beryllium	0.86	J	B		P_	Qualify	19
7440-43-9	Cadmium__	1.2	J	B		P_	Qualify	19
7440-70-2	Calcium__	193000				P_		
7440-47-3	Chromium_	9.6	J	B		P_	Qualify	19
7440-48-4	Cobalt___	9.3	J	B		P_	Qualify	19
7440-50-8	Copper___	26.0				P_		
7439-89-6	Iron_____	8520	19.7			P_		
7439-92-1	Lead____	12.8	J			P_	Qualify	12,14
7439-95-4	Magnesium	38600				P_		
7439-96-5	Manganese	2960				P_		
7439-97-6	Mercury__	0.48				CV		
7440-02-0	Nickel___	45.2				P_		
7440-09-7	Potassium	6780				P_		
7782-49-2	Selenium_	2.2	J	U		P_	Qualify	11,14
7440-22-4	Silver___	2.1	J	B		P_	Qualify	19
7440-23-5	Sodium___	813000				P_		
7440-28-0	Thallium_	2.3	J	U		P_	Qualify	14
7440-62-2	Vanadium_	11.2	J	B		P_	Qualify	19
7440-66-6	Zinc_____	103	J		E	P_	Qualify	18
	Cyanide__	18.6			N	AS	Qualify	16,17

Color Before: ORANGE___ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

ILM03.0

FORM I - IN

002273

ATTACHMENT 55-72

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB3

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292743

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	Qualifier, Method	C	Blank conc.	Q	M	Action	FN
7429-90-5	Aluminum	151	J	B			P	Negate	20
7440-36-0	Antimony	2.5		U			P		
7440-38-2	Arsenic	2.8	J	U			P	Qualify	14
7440-39-3	Barium	139	J	B			P	Qualify	19
7440-41-7	Beryllium	0.10		U			P		
7440-43-9	Cadmium	0.30		U			P		
7440-70-2	Calcium	29600					P		
7440-47-3	Chromium	0.69	J	B			P	Qualify	19
7440-48-4	Cobalt	1.4		U			P		
7440-50-8	Copper	11.4	J	B			P	Qualify	19
7439-89-6	Iron	5250	19.7				P		
7439-92-1	Lead	4.3	J				P	Qualify	12, 14
7439-95-4	Magnesium	3830	J	B			P	Qualify	19
7439-96-5	Manganese	426					P		
7439-97-6	Mercury	0.10		U			CV		
7440-02-0	Nickel	1.4		U			P		
7440-09-7	Potassium	4850	J	B			P	Qualify	19
7782-49-2	Selenium	2.2	J	U			P	Qualify	11, 19
7440-22-4	Silver	0.70		U			P		
7440-23-5	Sodium	80600					P		
7440-28-0	Thallium	2.3	J	U			P	Qualify	14
7440-62-2	Vanadium	2.4	J	B			P	Qualify	19
7440-66-6	Zinc	17.3	J	B		E	P	Negate	20
	Cyanide	5.0	---	U		N	AS	Reject	15

Color Before: GRAY_____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT SS-4

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

MWB5

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292744

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	Action	FR
		Qualifier, Method Blank conc.					
7429-90-5	Aluminum_	59500			P		
7440-36-0	Antimony_	J 5.2	B		P	Qualify	19
7440-38-2	Arsenic__	J 48.4			P	Qualify	14
7440-39-3	Barium___	559			P		
7440-41-7	Beryllium	J 2.6	B		P	Qualify	19
7440-43-9	Cadmium__	19.0			P		
7440-70-2	Calcium__	55400			P		
7440-47-3	Chromium_	106			P		
7440-48-4	Cobalt___	169			P		
7440-50-8	Copper___	354			P		
7439-89-6	Iron_____	19.7 143000			P	Qualify	14
7439-92-1	Lead_____	J 157			P		
7439-95-4	Magnesium	16600			P		
7439-96-5	Manganese	3900			P		
7439-97-6	Mercury__	0.44			CV		
7440-02-0	Nickel___	97.3			P		
7440-09-7	Potassium	12400			P		
7782-49-2	Selenium_	J 6.4			P	Qualify	10,14
7440-22-4	Silver___	J 5.2	B		P	Qualify	19
7440-23-5	Sodium___	24600			P		
7440-28-0	Thallium_	J 2.3	U		P	Qualify	14
7440-62-2	Vanadium_	119			P		
7440-66-6	Zinc_____	J 831		E	P	Qualify	18
	Cyanide__	J 7.3		N	AS	Qualify	17

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT SS-44

U.S. EPA - CLP

1
INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ12

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292748

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	Action	FN
		Qualifier Method		Blank Conc.			
7429-90-5	Aluminum_	16500			P_		
7440-36-0	Antimony_	2.5	U		P_		
7440-38-2	Arsenic__	J 18.5			P_	Qualify	14
7440-39-3	Barium___	853			P_		
7440-41-7	Beryllium	J 0.52	B		P_	Qualify	19
7440-43-9	Cadmium__	0.30	U		P_		
7440-70-2	Calcium__	140000			P_		
7440-47-3	Chromium_	69.3			P_		
7440-48-4	Cobalt___	J 26.1	B		P_	Qualify	19
7440-50-8	Copper___	39.2			P_		
7439-89-6	Iron____	19.7 58200			P_		
7439-92-1	Lead____	J 25.8			P_	Qualify	12,14
7439-95-4	Magnesium	46600			P_		
7439-96-5	Manganese	24400			P_		
7439-97-6	Mercury__	0.10	U		CV		
7440-02-0	Nickel___	J 25.9	B		P_	Qualify	19
7440-09-7	Potassium	10400			P_		
7782-49-2	Selenium_	J 2.2	U		P_	Qualify	11,14
7440-22-4	Silver___	0.70	U		P_		
7440-23-5	Sodium___	91400			P_		
7440-28-0	Thallium_	J 2.3	U		P_	Qualify	14
7440-62-2	Vanadium_	J 39.2	B		P_	Qualify	19
7440-66-6	Zinc____	J 87.5		E	P_	Qualify	18
	Cyanide__	J 99.5		N	AS	Qualify	9,16,17

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

002276
ATTACHMENT SS-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ13

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292749

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	Qualifiers, Method	C	Blank Conc.	Q	M	Action	FN
7429-90-5	Aluminum	1240					P		
7440-36-0	Antimony	2.5		U			P		
7440-38-2	Arsenic	3.5	J	B			P	Qualify	14,19
7440-39-3	Barium	584					P		
7440-41-7	Beryllium	0.10		U			P		
7440-43-9	Cadmium	0.30		U			P		
7440-70-2	Calcium	115000					P		
7440-47-3	Chromium	2.7	J	B			P	Qualify	19
7440-48-4	Cobalt	1.4		U			P		
7440-50-8	Copper	16.7	J	B			P	Qualify	19
7439-89-6	Iron	77800	19.7				P		
7439-92-1	Lead	8.9	J				P	Qualify	12,14
7439-95-4	Magnesium	15500					P		
7439-96-5	Manganese	9070					P		
7439-97-6	Mercury	0.22					CV		
7440-02-0	Nickel	4.1	J	B			P	Qualify	19
7440-09-7	Potassium	5640					P		
7782-49-2	Selenium	2.2	J	U			P	Qualify	11,14
7440-22-4	Silver	0.70		U			P		
7440-23-5	Sodium	240000					P		
7440-28-0	Thallium	2.3	J	U			P	Qualify	14
7440-62-2	Vanadium	6.5	J	B			P	Qualify	19
7440-66-6	Zinc	73.0	J			E	P	Qualify	18
	Cyanide	5.0	---	U		N	AS	Reject	15

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

002277

ATTACHMENT SS-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ14

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292750

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	Qualifiers, Method	C	Q	M	Action	FN
7429-90-5	Aluminum_	1170				P_		
7440-36-0	Antimony_	2.5		U		P_		
7440-38-2	Arsenic__	2.8	J	U		P_	Qualify	14
7440-39-3	Barium___	118	J	B		P_	Qualify	19
7440-41-7	Beryllium	0.10		U		P_		
7440-43-9	Cadmium__	0.30		U		P_		
7440-70-2	Calcium__	72500				P_		
7440-47-3	Chromium_	2.5	J	B		P_	Qualify	19
7440-48-4	Cobalt___	2.4	J	B		P_	Qualify	19
7440-50-8	Copper___	10.2	J	B		P_	Qualify	19
7439-89-6	Iron_____	3340				P_		
7439-92-1	Lead_____	2.3	19,7 J	B		P_	Qualify	12,
7439-95-4	Magnesium	10000				P_		
7439-96-5	Manganese	1010				P_		
7439-97-6	Mercury__	0.17	J	B		CV	Qualify	19
7440-02-0	Nickel___	5.3	J	B		P_	Qualify	19
7440-09-7	Potassium	5120				P_		
7782-49-2	Selenium_	2.2	J	U		P_	Qualify	11,14
7440-22-4	Silver___	0.70		U		P_		
7440-23-5	Sodium___	23300				P_		
7440-28-0	Thallium_	2.3	J	U		P_	Qualify	14
7440-62-2	Vanadium_	2.1	J	B		P_	Qualify	19
7440-66-6	Zinc_____	34.6	J		E	P_	Qualify	3
	Cyanide__	5.0	---	U	N	AS	Reject	15

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: COLORLESS Clarity After: CLEAR_ Artifacts: _____

Comments:

ILM03.0

FORM I - IN

002278 SS-47

ATTACHMENT

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ2A

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292745

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	Action	FN
		Qualifiers, Method		Blank Corr.			
7429-90-5	Aluminum_	7270			P_		
7440-36-0	Antimony_	2.5	U		P_		
7440-38-2	Arsenic__	9.8	B		P_	Qualify	14,19
7440-39-3	Barium___	J 199	B		P_	Qualify	19
7440-41-7	Beryllium	J 0.21	B		P_	Qualify	19
7440-43-9	Cadmium__	0.30	U		P_		
7440-70-2	Calcium__	96000			P_		
7440-47-3	Chromium_	14.9			P_		
7440-48-4	Cobalt___	J 5.4	B		P_	Qualify	19
7440-50-8	Copper___	J 21.4	B		P_	Qualify	19
7439-89-6	Iron_____	19.7 45200			P_		
7439-92-1	Lead____	J 78.4			P_	Qualify	14
7439-95-4	Magnesium	17100			P_		
7439-96-5	Manganese	784			P_		
7439-97-6	Mercury__	0.32			CV		
7440-02-0	Nickel___	J 11.8	B		P_	Qualify	19
7440-09-7	Potassium	12600			P_		
7782-49-2	Selenium_	J 2.2	U		P_	Qualify	11,
7440-22-4	Silver___	0.70	U		P_		
7440-23-5	Sodium___	49900			P_		
7440-28-0	Thallium_	J 2.3	U		P_	Qualify	14
7440-62-2	Vanadium_	J 25.7	B		P_	Qualify	19
7440-66-6	Zinc____	J 64.1		E	P_	Qualify	3
	Cyanide__	J 24.4		N	AS	Qualify	9,

Color Before: BROWN____ Clarity Before: CLOUDY -- Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

ILM03.0

FORM I - IN

002280

ATTACHMENT SS-48

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ15

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292751

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration	C	Q	M	Action	FN
		Qualifier, Method Blank conc.					
7429-90-5	Aluminum	41500			P		
7440-36-0	Antimony	2.5	U		P		
7440-38-2	Arsenic	J 21.5			P	Qualify	14
7440-39-3	Barium	974			P		
7440-41-7	Beryllium	J 1.7	B		P	Qualify	19
7440-43-9	Cadmium	0.30	U		P		
7440-70-2	Calcium	105000			P		
7440-47-3	Chromium	68.0			P		
7440-48-4	Cobalt	J 29.0	B		P	Qualify	19
7440-50-8	Copper	80.4			P		
7439-89-6	Iron	19.7 116000			P	Qualify	14
7439-92-1	Lead	J 148			P		
7439-95-4	Magnesium	30200			P		
7439-96-5	Manganese	11900			P		
7439-97-6	Mercury	0.27			CV		
7440-02-0	Nickel	81.0			P		
7440-09-7	Potassium	15600			P		
7782-49-2	Selenium	J 3.0	B		P	Qualify	10,14,19
7440-22-4	Silver	0.70	U		P		
7440-23-5	Sodium	99400			P		
7440-28-0	Thallium	J 2.3	U		P	Qualify	14
7440-62-2	Vanadium	106			P		
7440-66-6	Zinc	J 190		E	P	Qualify	18
	Cyanide	J 16.6		N	AS	Qualify	16,17

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

002279

ATTACHMENT SS-4

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ26

b Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

b Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

atrix (soil/water): WATER Lab Sample ID: 292752

evel (low/med): LOW__ Date Received: 03/01/96

Solids: __0.0

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

CAS No.	Analyte	Concentration Qualifiers, Method Blank conc.	C	Q	M	Action	FN
7429-90-5	Aluminum_	700			P_		
7440-36-0	Antimony_	2.5	U		P_	Qualify	14
7440-38-2	Arsenic__	2.8	U		P_		
7440-39-3	Barium___	J 706			P_		
7440-41-7	Beryllium	0.10	U		P_		
7440-43-9	Cadmium__	0.30	U		P_		
7440-70-2	Calcium__	134000			P_	Qualify	19
7440-47-3	Chromium_	8.2	B		P_	Qualify	19
7440-48-4	Cobalt___	J 2.1	B		P_	Qualify	19
7440-50-8	Copper___	J 13.6	B		P_		
7439-89-6	Iron_____	J 33900			P_	Qualify	12,14
7439-92-1	Lead_____	19.7			P_		
7439-95-4	Magnesium	J 3.4			P_		
7439-96-5	Manganese	19900			P_		
7439-97-6	Mercury__	5970			CV	Qualify	19
7440-02-0	Nickel___	J 0.11	B		P_	Qualify	19
7440-09-7	Potassium	J 4.7	B		P_		
7782-49-2	Selenium_	7510			P_	Qualify	11,14
7440-22-4	Silver___	J 2.2	U		P_		
7440-23-5	Sodium___	0.70	U		P_		
7440-28-0	Thallium_	119000			P_	Qualify	14
7440-62-2	Vanadium_	J 2.3	U		P_		
7440-66-6	Zinc_____	1.6	U		P_	Qualify	3
	Cyanide__	26.0		E	P_		
		J 5.0	U	N	AS	Reject	15

Color Before: BROWN____ Clarity Before: CLOUDY Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

ILM03.0

FORM I - IN

002281

ATTACHMENT SS-50

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ7

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292746

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration Qualifiers, Method Blank Conc	C	Q	M	Action	FN
7429-90-5	Aluminum	J 246			P	Qualify	21
7440-36-0	Antimony	2.5	U		P		
7440-38-2	Arsenic	J 4.4	B		P	Qualify	14, 19
7440-39-3	Barium	546			P		
7440-41-7	Beryllium	0.10	U		P		
7440-43-9	Cadmium	0.30	U		P		
7440-70-2	Calcium	274000			P		
7440-47-3	Chromium	J 0.81	B		P	Qualify	19
7440-48-4	Cobalt	1.4	U		P		
7440-50-8	Copper	J 1.2	B		P	Qualify	19
7439-89-6	Iron	19.7 16000			P		
7439-92-1	Lead	J 4.8			P	Qualify	12,14
7439-95-4	Magnesium	14000			P		
7439-96-5	Manganese	881			P		
7439-97-6	Mercury	J 0.11	B		CV	Qualify	19
7440-02-0	Nickel	J 2.3	B		P	Qualify	19
7440-09-7	Potassium	14700			P		
7782-49-2	Selenium	J 2.2	U		P	Qualify	11,14
7440-22-4	Silver	0.70	U		P		
7440-23-5	Sodium	394000			P		
7440-28-0	Thallium	J 2.3	U		P	Qualify	14
7440-62-2	Vanadium	1.6	U		P		
7440-66-6	Zinc	J 36.7		E	P	~~Qualify~~	18,21
	Cyanide	--- 5.0	U	N	AS	Reject	15

Color Before: COLORLESS Clarity Before: CLEAR_ Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

002282

ATTACHMENT 55-5

U.S. EPA - CLP

1

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

NJ9

Lab Name: INCHCAPE_ENVIRONMENTAL___ Contract: 95X22651__

Lab Code: INCHVT Case No.: PA022_ SAS No.: _____ SDG No.: BEC2D_

Matrix (soil/water): WATER Lab Sample ID: 292747

Level (low/med): LOW__ Date Received: 03/01/96

% Solids: __0.0

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

CAS No.	Analyte	Concentration Qualifiers, Method	C	Q Blank Conc.	M	Action	FN
7429-90-5	Aluminum_	225000			P		
7440-36-0	Antimony_	J 4.6	B		P	Qualify	19
7440-38-2	Arsenic__	J 161			P	Qualify	14
7440-39-3	Barium__	2740			P		
7440-41-7	Beryllium	19.1			P		
7440-43-9	Cadmium__	J 3.2	B		P	Qualify	19
7440-70-2	Calcium__	138000			P		
7440-47-3	Chromium_	653			P		
7440-48-4	Cobalt___	166			P		
7440-50-8	Copper___	1320			P		
7439-89-6	Iron____	19,7 760000			P		
7439-92-1	Lead____	J 945			P	Qualify	14
7439-95-4	Magnesium	50800			P		
7439-96-5	Manganese	6630			P		
7439-97-6	Mercury__	3.2			CV		
7440-02-0	Nickel___	415			P		
7440-09-7	Potassium	18400			P		
7782-49-2	Selenium_	J 7.8			P	Qualify	10,14
7440-22-4	Silver___	J 4.1	B		P	Qualify	19
7440-23-5	Sodium___	26600			P		
7440-28-0	Thallium_	J 2.3	U		P	Qualify	14
7440-62-2	Vanadium_	657			P		
7440-66-6	Zinc____	J 1840		E	P	Qualify	18
	Cyanide__	J 27.9		N	AS	Qualify	9,18

Color Before: BROWN____ Clarity Before: OPAQUE Texture: _____

Color After: YELLOW___ Clarity After: CLEAR_ Artifacts: _____

Comments:

FORM I - IN ILM03.0

ATTACHMENT SS-5

ATTACHMENT TT

ORGANICS ANALYSIS DATA SHEET- VOLATILE ORGANICS
TASK III

Sample: NJ 23

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230178

SAMPLE MATRIX: Liquid Non Aqueous

CONC/DIL FACTOR: 50

RELEASE AUTHORIZED BY: M Brown

CONCENTRATION: LOW HIGH (circle one)

PERCENT MOISTURE: (Not Decanted) NA

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/23/96

DATE EXTRACTED/PREPARED: NA

DATE ANALYZED: 03/12/96

UNITS: ug/L or ug/Kg

pH:

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
74-87-3	Chloromethane	U	250
74-83-9	Bromomethane	U	250
75-01-4	Vinyl Chloride	U	250
75-00-3	Chloroethane	U	250
75-09-2	Methylene Chloride	U	250
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
75-35-4	1,1-Dichloroethene	U	250
75-34-3	1,1-Dichloroethane	U	250
156-60-5	trans-1,2-Dichloroethene	U	250
67-66-4	Chloroform	U	250
107-06-2	1,2-Dichloroethane	U	250
78-93-3	2-Butanone		
71-55-6	1,1,1-Trichloroethane	U	250
56-23-5	Carbon Tetrachloride	U	250
108-05-4	Vinyl Acetate		
75-27-4	Bromodichloromethane	U	250
75-69-4	Trichlorofluoromethane	U	250
1634-04-4	tert-Butylmethylether		
74-95-3	Dibromomethane		
563-58-6	1,1-Dichloropropene		
96-18-4	1,2,3-Trichloropropane		
78-87-5	1,2-Dichloropropane	U	250
95-50-1	1,2-Dichlorobenzene		

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorotoluene		
78-87-5	1,2-Dichloropropene		
10061-02-6	trans-1,3-Dichloropropene	U	250
79-01-6	Trichloroethene	U	250
124-48-1	Dibromochloromethane	U	250
79-00-5	1,1,2-Trichloroethane	U	250
71-43-2	Benzene	690	250
10061-01-5	cis-1,3-Dichloropropene	U	250
110-75-8	2-Chloroethylvinylether		
75-25-2	Bromoform	U	250
108-10-1	4-Methyl-2-pentanone		
591-87-5	2-Hexanone		
127-18-4	Tetrachloroethene	U	250
79-34-5	1,1,2,2-Tetrachloroethane	U	250
108-88-3	Toluene	700	250
108-90-7	Chlorobenzene	U	250
100-41-4	Ethylbenzene	1900	250
100-42-5	Styrene		
108-20-3	Diisopropyl Ether		
95-49-8	2-Chlorotoluene		
108-41-8	3-Chlorotoluene		
106-43-4	4-Chlorotoluene		
1330-20-7	Total Xylenes	8300	250

Vs_____ or Wg 0.1 Vf 5000 Vi 5000

NJDEPE FORM VOA-1 (9/91)
revised 7/92, 1/93

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: N123

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230178
SAMPLE MATRIX: LIQUID NON AQUEOUS
CONC/DIL FACTOR: 100
CONCENTRATION: LOW HIGH (circle one)
TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/20/96
DATE EXTRACTED/PREPARED: 03/04/96
DATE ANALYZED: 03/18/96
DATA RELEASE AUTHORIZED BY: [signature]
PERCENT MOISTURE: (Not Decanted) ~~100~~ NA CT 4/2/96
UNITS: ug/L or ug/Kg

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: NA
GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
108-95-2	Phenol	U	1000
111-44-4	bis(2-Chloroethyl)ether	U	500
95-57-8	2-Chlorophenol	U	1000
541-73-1	1,3-Dichlorobenzene	U	500
106-46-7	1,3-Dichlorobenzene	U	500
100-51-6	Benzyl Alcohol	U	500
95-50-1	1,2-Dichlorobenzene	U	500
95-48-7	2-Methylphenol	U	1000
108-60-1	bis(2-Chlorophenylisopropyl)ether	U	500
106-44-5	4-Methylphenol	U	1000
621-64-7	N-Nitroso-di-n-propylamine	U	500
67-72-1	Hexachloroethane	U	500
98-95-3	Nitrobenzene	U	500
78-59-1	Isophorone	U	500
88-75-5	2-Nitrophenol	U	1000
105-67-5	2,4-Dimethylphenol	U	1000
65-85-0	Benzoic Acid	U	1000
111-91-1	bis(2-chloromethoxy)methane	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
83-32-9	Acenaphthene	U	500
51-28-5	2,4-Dinitrophenol	U	1000
100-02-7	4-Nitrophenol	U	1000
132-64-9	Dibenzofuran		
121-14-2	2,4-Dinitrotoluene	U	500
606-20-2	2,6-Dinitrotoluene	U	500
84-66-2	Diethylphthalate	U	500
7005-72-3	4-Chlorophenyl-phenylether	U	500
86-73-7	Fluorene	134 J	500
100-01-6	4-Nitroaniline	U	500
534-52-1	4,6-Dinitro-2-methylphenol	U	1000
86-30-6	N-Nitrosodiphenylamine (1)	U	500
101-55-3	4-Bromophenyl-phenylether	U	500
118-74-1	Hexachlorobenzene	U	500
87-86-5	Pentachlorophenol	U	1000
85-01-8	Phenanthrene	334 J	500
120-12-7	Anthracene	U	500
84-74-2	Di-n-butylphthalate	U	500

(1) Can not be seperated from Diphenylamine
Vs = volume of water extracted (mL) Vf = volumne of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

Vs: ____ or Wg 0.1 Vf 1000 Vi 2

NJDEPE FORM SV-1A (9/91) revised 1/93

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ATTACHMENT TT-2

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: N123

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230178
SAMPLE MATRIX: LIQUID NON AQUEOUS
CONC/DIL FACTOR: 100
CONCENTRATION: LOW (HIGH) (circle one)
TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/20/96
DATE EXTRACTED/PREPARED: 03/01/96
DATE ANALYZED: 03/18/96
DATA RELEASE AUTHORIZED BY: [illegible]
PERCENT MOISTURE: (Not Decanted) ~~100~~ NA
UNITS: ug/l or ug/Kg

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: NA
GPC CLEANUP: YES (NO) (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
120-83-2	2,4-Dichlorophenol	U	1000
120-82-1	1,2,4-Trichlorobenzene	U	500
91-20-3	Napthalene	U	500
106-47-8	4-Chloroaniline	U	500
87-68-3	Hexachlorobutadiene	U	500
59-50-7	4-Chloro-3-methylphenol	U	1000
91-57-5	2-Methylnapthalene		
77-47-4	Hexachlorocyclopentadiene	U	500
88-06-2	2,4,6-Trichlorophenol	U	1000
95-95-4	2,4,5-Trichlorophenol	U	1000
91-58-7	2-chloronaphthalene	U	500
88-74-4	2-Nitroaniline	U	500
131-11-3	Dimethylphthalate	U	500
208-96-8	Acenaphthalene	U	500
99-09-2	3-Nitroaniline	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
62-75-9	N-Nitrosodimethylamine	U	500
206-44-0	Fluoranthene	U	500
129-00-0	Pyrene	U	500
85-68-7	Butylbenzylphthalene	U	500
91-94-1	3,3'-Dichlorobenzidine	U	500
56-55-3	Benzo(a)Anthracene	U	500
117-81-7	bis(2-ethylhexyl)phthalate	U	500
218-01-9	Chrysene	1360 J	500
117-84-0	Di-n-octylphthalate	U	500
205-99-2	Benzo(b)fluoranthene	U	500
50-32-8	Benzo(a)pyrene	U	500
193-39-5	Indeno(1,2,3-cd)pyrene	U	500
53-70-3	Dibenzo(a,b)anthracene	U	500
191-24-2	Benzo(g,h,i)perylene	U	500
92-87-5	Benzidine	U	500

Vs _____ or Wg 0.1 Vf 10000 Vi _____

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM SV-1B (9/91) revised 7/92, 1/93

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ATTACHMENT TT-3

SEMIVOLATILE ORGANIC COMPOUNDS - PESTICIDES/PCB ANAYSIS DATA SHEET

TASKS II & III

Sample: NJ23.

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230178

SAMPLE MATRIX: LIQUID (NON-AQUEOUS)

EXTRACTION METHOD: WASTE DILUTION

CONC./DIL/ FACTOR: 1

DATA RELEASE AUTHORIZED BY: [signature]

PERCENT MOISTURE: (Not Decanted) NA

CONCENTRATION: LOW HIGH (CIRCLE ONE)

(circle one) ug/L ug/Kg

CASE NUMBER:

QC REPORT No:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/04/96

DATE ANALYZED: 03/31/96

GPC CLEANUP: YES NO (circle one) pH: NA

CAS NO.	COMPOUND	SAMPLE	MDL
309-00-2	Aldrin	ND	50
319-84-6	Alpha-BHC	ND	50
319-85-7	Beta-BHC	ND	50
319-86-8	Delta-BHC	ND	50
58-89-9	Gamma-BHC	ND	50
5103-71-9	Alpha-Chlordane		
5103-74-2	Gamma-Chlordane		
57-74-9	Tech. Chlordane	ND	500
60-57-1	Dieldrin	ND	100
959-98-8	Endosulfan I	ND	50
33213-65-9	Endosulfan II	ND	100
1031-07-8	Endosulfan Sulfate	ND	100
72-20-8	Endrin	ND	100
7421-93-4	Endrin Aldehyde	ND	100
53494-70-5	Endrin Ketone		
76-44-8	Heptachlor	ND	50
1024-57-3	Heptachlor Epoxide	ND	50
72-43-5	Methoxychlor		
72-54-8	4,4'-DDD	ND	100
72-55-9	4,4'-DDE	ND	100
50-29-3	4,4'-DDT	ND	100

CAS NO.	COMPOUND	SAMPLE	MDL
8001-35-2	Toxaphene	ND	5000
12674-11-2	Aroclor 1016	ND	1000
11104-28-2	Aroclor 1221	ND	2000
11141-16-5	Aroclor 1232	ND	1000
53469-21-9	Aroclor 1242	ND	1000
12672-29-6	Aroclor 1248	ND	1000
11097-69-1	Aroclor 1254	ND	1000
11096-82-5	Aroclor 1260	ND	1000
15972-60-8	Alachlor		
1912-24-9	Atrazine		
1897-45-6	DCPA (Dacthal)		
2593-15-9	Etridiazole		
118-74-1	Hexachlorobenzene		
77-74-4	Hexachlor(1)		
5103-73-1	cis-Nonachlor		
39765-80-5	trans-Nonachlor		
52645-53-1	cis-Permethrin		
52645-53-1	trans-Permethrin		
1918-16-7	Propachlor		
122-34-9	Simazine		
1582-0908	Trifluralin		

Vs _____ or Wg 1.0 Vf 10,000 Vi 1.0

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

Hexachlor(1) = Hexachlorcyclopentadiene

NJDEPE FORM P-1 (9/91) revised 7/92, 1/93

ATTACHMENT T.T-4

GENERAL ANALYSIS DATA SHEET

Sample: NJ23

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230178

SAMPLE MATRIX: Liquid (non aqueous)

EXTRACTION METHOD: SW 846 CHPT 7

ANALYTICAL METHOD #: 9010

PERCENT MOISTURE: (Not Decanted) ~~0.0~~ NA

DATA RELEASE AUTHORIZED BY: [signature] 04/04/96

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/01/96

DATE ANALYZED: 03/01/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 10g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
Reactive Cyanide	U	U	0.20

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT TT-5

INORGANIC ANAYSIS DATA SHEET

Sample: NJ23

LABORATORY NAME: ICM

LAB FILE ID: 230178 pH: NA

CONTRACT No: X26174

SAMPLE MATRIX: Liquid / Non-Aqueous

PROJECT NO: PA022796

DILUTION FACTOR: ICP/Fe 50 ; Hg 200

DATE SAMPLE RECEIVED: 02/28/96

UNITS: ug/L or mg/Kg (circle one)

PERCENT MOISTURE: ~~0.0~~ NA

ANALYTE	CONC. RESULTS	Q	M	MDL
ALUMINUM				
ANTIMONY	<3.0			3.0
ARSENIC	0.64			0.20
BARIUM				
BERYLLIUM	<0.25			0.25
CADMIUM	<0.25			0.25
CALCIUM				
CHROMIUM	<0.50			0.50
COBALT				
COPPER	33			1.2
CYANIDE				
IRON				
LEAD	0.24 ~~<0.20~~			0.20
MAGNESIUM				
MANGANESE				
MERCURY	<0.10			0.10
NICKEL	3.0			1.2
POTASSIUM				
SELENIUM	0.36			0.20
SILVER	<0.50			0.50
SODIUM				
THALLIUM	<0.20			0.20
VANADIUM				
ZINC	<1.0			1.0

NJDEP FORM M-1 (12/94)

ATTACHMENT TT-6

ORGANICS ANALYSIS DATA SHEET- VOLATILE ORGANICS
TASK III

Sample: BEC-1D

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230179

SAMPLE MATRIX: Liquid Non Aqueous

CONC./DIL/ FACTOR: 50

RELEASE AUTHORIZED BY: M. Baron

CONCENTRATION: LOW HIGH (circle one)

PERCENT MOISTURE: (Not Decanted) NA

CASE NUMBER:

CONTRACT No: X20174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: NA

DATE ANALYZED: 03/11/96

UNITS: ug/L or ug/Kg

pH:

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
74-87-3	Chloromethane	U	250
74-83-9	Bromomethane	U	250
75-01-4	Vinyl Chloride	U	250
75-00-3	Chloroethane	U	250
75-09-2	Methylene Chloride	U	250
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
75-35-4	1,1-Dichloroethene	U	250
75-34-3	1,1-Dichloroethane	U	250
156-60-5	trans-1,2-Dichloroethene	U	250
67-66-4	Chloroform	U	250
107-06-2	1,2-Dichloroethane	U	250
78-93-3	2-Butanone		
71-55-6	1,1,1-Trichloroethane	U	250
56-23-5	Carbon Tetrachloride	U	250
108-05-4	Vinyl Acetate		
75-27-4	Bromodichloromethane	U	250
75-69-4	Trichlorofluoromethane	U	250
1634-04-4	tert-Butylmethylether		
74-95-3	Dibromomethane		
563-58-6	1,1-Dichloropropene		
96-18-4	1,2,3-Trichloropropane		
78-87-5	1,2-Dichloropropane	U	250
95-50-1	1,2-Dichlorobenzene		

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorotoluene		
78-87-5	1,2-Dichloropropene		
10061-02-6	trans-1,3-Dichloropropene	U	250
79-01-6	Trichloroethene	U	250
124-48-1	Dibromochloromethane	U	250
79-00-5	1,1,2-Trichloroethane	U	250
71-43-2	Benzene	U	250
10061-01-5	cis-1,3-Dichloropropene	U	250
110-75-8	2-Chloroethylvinylether		
75-25-2	Bromoform	U	250
108-10-1	4-Methyl-2-pentanone		
591-87-5	2-Hexanone		
127-18-4	Tetrachloroethene	U	250
79-34-5	1,1,2,2-Tetrachloroethane	U	250
108-88-3	Toluene	120 J	250
108-90-7	Chlorobenzene	U	250
100-41-4	Ethylbenzene	690	250
100-42-5	Styrene		
108-20-3	Diisopropyl Ether		
95-49-8	2-Chlorotoluene		
108-41-8	3-Chlorotoluene		
106-43-4	4-Chlorotoluene		
1330-20-7	Total Xylenes	1170	250

Vs_____ or Wg 0.1 Vf 5000 Vi 5000

NJDEPE FORM VOA-1 (9/91)
revised 7/92, 1/93

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: BEC-1D

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230179

SAMPLE MATRIX: LIQUID NON AQUEOUS

CONC/DIL FACTOR: 100

CONCENTRATION: LOW HIGH (circle one)

TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/20/96

DATE EXTRACTED/PREPARED: 03/04/96

DATE ANALYZED: 03/18/96

DATA RELEASE AUTHORIZED BY: [illegible]

PERCENT MOISTURE: (Not Decanted) ~~100~~ NA

UNITS: ug/L ug/Kg

CASE NUMBER:

QC REPORT No:

CONTRACT No: X26174

pH: NA

GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
108-95-2	Phenol	U	1000
111-44-4	bis(2-Chloroethyl)ether	U	500
95-57-8	2-Chlorophenol	U	1000
541-73-1	1,3-Dichlorobenzene	U	500
106-46-7	1,3-Dichlorobenzene	U	500
100-51-6	Benzyl Alcohol	U	500
95-50-1	1,2-Dichlorobenzene	U	500
95-48-7	2-Methylphenol	U	1000
108-60-1	bis(2-Chlorophenylisopropyl)ether	U	500
106-44-5	4-Methylphenol	U	1000
621-64-7	N-Nitroso-di-n-propylamine	U	500
67-72-1	Hexachloroethane	U	500
98-95-3	Nitrobenzene	U	500
78-59-1	Isophorone	U	500
88-75-5	2-Nitrophenol	U	1000
105-67-5	2,4-Dimethylphenol	U	1000
65-85-0	Benzoic Acid	U	1000
111-91-1	bis(2-chloromethoxy)methane	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
83-32-9	Acenaphthene	U	500
51-28-5	2,4-Dinitrophenol	U	1000
100-02-7	4-Nitrophenol	U	1000
132-64-9	Dibenzofuran		
121-14-2	2,4-Dinitrotoluene	U	500
606-20-2	2,6-Dinitrotoluene	U	500
84-66-2	Diethylphthalate	U	500
7005-72-3	4-Chlorophenyl-phenylether	U	500
86-73-7	Fluorene	181 J	500
100-01-6	4-Nitroaniline	U	500
534-52-1	4,6-Dinitro-2-methylphenol	U	1000
86-30-6	N-Nitrosodiphenylamine (1)	U	500
101-55-3	4-Bromophenyl-phenylether	U	500
118-74-1	Hexachlorobenzene	U	500
87-86-5	Pentachlorophenol	U	1000
85-01-8	Phenanthrene	429 J	500
120-12-7	Anthracene	U	500
84-74-2	Di-n-butylphthalate	U	500

Vs:____ or Wg 0.1 Vt 10000 Vi 2

NJDEPE FORM SV-1A (9/91) revised 1/93

(1) Can not be separated from Diphenylamine

Vs = volume of water extracted (mL) Vt = volume of total extract (uL)

Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

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ATTACHMENT TT-8

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: BEC-1D

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230179
SAMPLE MATRIX: LIQUID NON AQUEOUS
CONC/DIL FACTOR: 100
CONCENTRATION: LOW HIGH (circle one)
TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/20/96
DATE EXTRACTED/PREPARED: 03/01/96
DATE ANALYZED: 03/18/96
DATA RELEASE AUTHORIZED BY: [illegible]
PERCENT MOISTURE: (Not Decanted) ~~100~~ NA
UNITS: ~~ug/l~~ ug/Kg

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: NA
GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
120-83-2	2,4-Dichlorophenol	U	1000
120-82-1	1,2,4-Trichlorobenzene	U	500
91-20-3	Napthalene	155 J	500
106-47-8	4-Chloroaniline	U	500
87-68-3	Hexachlorobutadiene	U	500
59-50-7	4-Chloro-3-methylphenol	U	1000
91-57-5	2-Methylnapthalene		
77-47-4	Hexachlorocyclopentadiene	U	500
88-06-2	2,4,6-Trichlorophenol	U	1000
95-95-4	2,4,5-Trichlorophenol	U	1000
91-58-7	2-chloronaphthalene	U	500
88-74-4	2-Nitroaniline	U	500
131-11-3	Dimethylphthalate	U	500
208-96-8	Acenaphthalene	U	500
99-09-2	3-Nitroaniline	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
62-75-9	N-Nitrosodimethylamine	U	500
206-44-0	Fluoranthene	U	500
129-00-0	Pyrene	U	500
85-68-7	Butylbenzylphthalene	U	500
91-94-1	3,3'-Dichlorobenzidine	U	500
56-55-3	Benzo(a)Anthracene	U	500
117-81-7	bis(2-ethylhexyl)phthalate	U	500
218-01-9	Chrysene	148 J	500
117-84-0	Di-n-octylphthalate	U	500
205-99-2	Benzo(b)fluoranthene	U	500
50-32-8	Benzo(a)pyrene	U	500
193-39-5	Indeno(1,2,3-cd)pyrene	U	500
53-70-3	Dibenzo(a,b)anthracene	U	500
191-24-2	Benzo(g,h,i)perylene	U	500
92-87-5	Benzidine	U	500

Vs _____ or Wg 0.1 Vt 10000 Vi 2

Vs = volume of water extracted (mL) Vt = volume of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM SV-1B (9/91) revised 7/92, 1/93

ATTACHMENT 7T-9

SEMIVOLATILE ORGANIC COMPOUNDS - PESTICIDES/PCB ANAYSIS DATA SHEET

TASKS II & III

Sample: BEC-1D

LABORATORY NAME: ICM

LAB SAMPLE ID No: 030179

SAMPLE MATRIX: LIQUID (NON-AQUEOUS)

EXTRACTION METHOD: WASTE DILUTION

CONC./DIL/ FACTOR: 1

DATA RELEASE AUTHORIZED BY: [illegible]

PERCENT MOISTURE: (Not Decanted) NA

CONCENTRATION: LOW HIGH (CIRCLE ONE)

(circle one) ug/L ug/Kg

CASE NUMBER:

QC REPORT No:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/04/96

DATE ANALYZED: 03/31/96

GPC CLEANUP: YES NO (circle one) pH: NA

CAS NO.	COMPOUND	SAMPLE	MDL
309-00-2	Aldrin	U	50
319-84-6	Alpha-BHC	U	50
319-85-7	Beta-BHC	U	50
319-86-8	Delta-BHC	U	50
58-89-9	Gamma-BHC	U	50
5103-71-9	Alpha-Chlordane		
5103-74-2	Gamma-Chlordane	U	
57-74-9	Tech. Chlordane	U	500
60-57-1	Dieldrin	U	100
959-98-8	Endosulfan I	U	50
33213-65-9	Endosulfan II	U	100
1031-07-8	Endosulfan Sulfate	U	100
72-20-8	Endrin	U	100
7421-93-4	Endrin Aldehyde	U	100
53494-70-5	Endrin Ketone		
76-44-8	Heptachlor	U	50
1024-57-3	Heptachlor Epoxide	U	50
72-43-5	Methoxychlor		
72-54-8	4,4'-DDD	U	100
72-55-9	4,4'-DDE	U	100
50-29-3	4,4'-DDT	U	100

CAS NO.	COMPOUND	SAMPLE	MDL
8001-35-2	Toxaphene	U	5000
12674-11-2	Aroclor 1016	U	1000
11104-28-2	Aroclor 1221	U	2000
11141-16-5	Aroclor 1232	U	1000
53469-21-9	Aroclor 1242	U	1000
12672-29-6	Aroclor 1248	U	1000
11097-69-1	Aroclor 1254	U	1000
11096-82-5	Aroclor 1260	U	1000
15972-60-8	Alachlor		
1912-24-9	Atrazine		
1897-45-6	DCPA (Dacthal)		
2593-15-9	Etridiazole		
118-74-1	Hexachlorobenzene		
77-74-4	Hexachlor(1)		
5103-73-1	cis-Nonachlor		
39765-80-5	trans-Nonachlor		
52645-53-1	cis-Permethrin		
52645-53-1	trans-Permethrin		
1918-16-7	Propachlor		
122-34-9	Simizine		
1582-0908	Trifluralin		

Vs _____ or Wg 1.0 Vf 10,000 Vi 1.0

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

Hexachlor(1) = Hexachlorcyclopentadiene

NJDEPE FORM P-1 (9/91) revised 7/92, 1/93

ATTACHMENT TT-10

GENERAL ANALYSIS DATA SHEET

Sample: BEC-1D

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230179

SAMPLE MATRIX: Liquid (non-aqueous)

EXTRACTION METHOD: SW 846 CHPT 7

ANALYTICAL METHOD #: 9010

PERCENT MOISTURE: (Not Decanted) ~~0.0~~ NA

DATA RELEASE AUTHORIZED BY: [signature] cr 4/4/96

DECANTED: YES NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/01/96

DATE ANALYZED: 03/01/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 10g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTIC LIMITS
Reactive Cyanide	U	U	0.20

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT TT-11

INORGANIC ANAYSIS DATA SHEET

Sample: BEC-1D

LABORATORY NAME: ICM

LAB FILE ID: 230179 pH: NA

CONTRACT No: X26174

SAMPLE MATRIX: Liquid / Non-Aqueous

PROJECT NO: PA022796

DILUTION FACTOR: ICP/FU 50 ; Hg 200

DATE SAMPLE RECEIVED: 02/28/96

UNITS: ug/L or mg/Kg (circle one)

PERCENT MOISTURE: ~~0.0~~ NA LT 4/2/96

ANALYTE	CONC. RESULTS	Q	M	MDL
ALUMINUM				
ANTIMONY	<3.0			3.0
ARSENIC	0.28			0.20
BARIUM				
BERYLLIUM	<0.25			0.25
CADMIUM	<0.25			0.25
CALCIUM				
CHROMIUM	<0.50			0.50
COBALT				
COPPER	15			1.2
CYANIDE				
IRON				
LEAD	03/29/96 ~~<0.20~~ 0.42			0.20
MAGNESIUM				
MANGANESE				
MERCURY	<0.10			0.10
NICKEL	2.2			1.2
POTASSIUM				
SELENIUM	0.26			0.20
SILVER	<0.50			0.50
SODIUM				
THALLIUM	<0.20			0.20
VANADIUM				
ZINC	<1.0			1.0

NJDEP FORM M-1 (12/94)

ATTACHMENT TT-12

ORGANICS ANALYSIS DATA SHEET- VOLATILE ORGANICS
TASK III

Sample: PW-2

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230180

SAMPLE MATRIX: Liquid Non Aqueous

CONC./DIL/ FACTOR: 50

RELEASE AUTHORIZED BY: M. Baron

CONCENTRATION: LOW HIGH (circle one)

PERCENT MOISTURE: (Not Decanted) NA

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 2/28/96

DATE EXTRACTED/PREPARED: NA

DATE ANALYZED: 03/11/96

UNITS: ug/L or ug/Kg

pH:

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
74-87-3	Chloromethane	U	250
74-83-9	Bromomethane	U	250
75-01-4	Vinyl Chloride	U	250
75-00-3	Chloroethane	U	250
75-09-2	Methylene Chloride	U	250
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
75-35-4	1,1-Dichloroethene	U	250
75-34-3	1,1-Dichloroethane	1900	250
156-60-5	trans-1,2-Dichloroethene	U	250
67-66-4	Chloroform	U	250
107-06-2	1,2-Dichloroethane	U	250
78-93-3	2-Butanone		
71-55-6	1,1,1-Trichloroethane	U	250
56-23-5	Carbon Tetrachloride	U	250
108-05-4	Vinyl Acetate		
75-27-4	Bromodichloromethane	U	250
75-69-4	Trichlorofluoromethane	U	250
1634-04-4	tert-Butylmethylether		
74-95-3	Dibromomethane		
563-58-6	1,1-Dichloropropene		
96-18-4	1,2,3-Trichloropropane		
78-87-5	1,2-Dichloropropane	U	250
95-50-1	1,2-Dichlorobenzene		

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorotoluene		
78-87-5	1,2-Dichloropropene		
10061-02-6	trans-1,3-Dichloropropene	U	250
79-01-6	Trichloroethene	U	250
124-48-1	Dibromochloromethane	U	250
79-00-5	1,1,2-Trichloroethane	U	250
71-43-2	Benzene	53 J	250
10061-01-5	cis-1,3-Dichloropropene	U	250
110-75-8	2-Chloroethylvinylether		
75-25-2	Bromoform	U	250
108-10-1	4-Methyl-2-pentanone		
591-87-5	2-Hexanone		
127-18-4	Tetrachloroethene	220 J	250
79-34-5	1,1,2,2-Tetrachloroethane	U	250
108-88-3	Toluene	94 J	250
108-90-7	Chlorobenzene	110 J	250
100-41-4	Ethylbenzene	U	250
100-42-5	Styrene		
108-20-3	Diisopropyl Ether		
95-49-8	2-Chlorotoluene		
108-41-8	3-Chlorotoluene		
106-43-4	4-Chlorotoluene		
1330-20-7	Total Xylenes	570	250

Vs_____ or Wg 0.1 Vf 5000 Vi 5000

NJDEPE FORM VOA-1 (9/91)
revised 7/92, 1/93

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

ATTACHMENT TT-13

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230190

SAMPLE MATRIX: LIQUID NON AQUEOUS

CONC/DIL FACTOR: 100

CONCENTRATION: LOW HIGH (circle one)

TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/20/96

DATE EXTRACTED/PREPARED: 03/04/96

DATE ANALYZED: 03/18/96

DATA RELEASE AUTHORIZED BY: [illegible]

PERCENT MOISTURE (Not Decanted) ~~100~~ NA

UNITS: ug/L or ug/Kg (circle one) 04/2/96

Sample: PW-2

CASE NUMBER:

QC REPORT No:

CONTRACT No: X26174

pH: NA

GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
108-95-2	Phenol	U	1000
111-44-4	bis(2-Chloroethyl)ether	U	500
95-57-8	2-Chlorophenol	U	1000
541-73-1	1,3-Dichlorobenzene	U	500
106-46-7	1,3-Dichlorobenzene	U	500
100-51-6	Benzyl Alcohol	U	500
95-50-1	1,2-Dichlorobenzene	U	500
95-48-7	2-Methylphenol	U	1000
108-60-1	bis(2-Chlorophenylisopropyl)ether	U	500
106-44-5	4-Methylphenol	U	1000
621-64-7	N-Nitroso-di-n-propylamine	U	500
67-72-1	Hexachloroethane	U	500
98-95-3	Nitrobenzene	U	500
78-59-1	Isophorone	U	500
88-75-5	2-Nitrophenol	U	1000
105-67-5	2,4-Dimethylphenol	U	1000
65-85-0	Benzoic Acid	U	1000
111-91-1	bis(2-chloromethoxy)methane	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
83-32-9	Acenaphthene	U	500
51-28-5	2,4-Dinitrophenol	U	1000
100-02-7	4-Nitrophenol	U	1000
132-64-9	Dibenzofuran		
121-14-2	2,4-Dinitrotoluene	U	500
606-20-2	2,6-Dinitrotoluene	U	500
84-66-2	Diethylphthalate	U	500
7005-72-3	4-Chlorophenyl-phenylether	U	500
86-73-7	Fluorene	102 J	500
100-01-6	4-Nitroaniline	U	500
534-52-1	4,6-Dinitro-2-methylphenol	U	1000
86-30-6	N-Nitrosodiphenylamine (1)	U	500
101-55-3	4-Bromophenyl-phenylether	U	500
118-74-1	Hexachlorobenzene	U	500
87-86-5	Pentachlorophenol	U	1000
85-01-8	Phenanthrene	237 J	500
120-12-7	Anthracene	U	500
84-74-2	Di-n-butylphthalate	U	500

Vs: ____ or Wg 0.1 Vf 10000 Vi 2

NJDEPE FORM SV-1A (9/91) revised 1/93

(1) Can not be separated from Diphenylamine

Vs = volume of water extracted (mL) Vf = volumne of total extract (uL)

Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

ATTACHMENT TT-14

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: PW-2

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230190
SAMPLE MATRIX: LIQUID NON AQUEOUS
CONC/DIL FACTOR: 100
CONCENTRATION: LOW HIGH (circle one)
TYPE OF EXTRACTION: WASTE DILUTION

DATE SAMPLE RECEIVED: 02/26/96
DATE EXTRACTED/PREPARED: 03/01/96
DATE ANALYZED: 03/18/96
DATA RELEASE AUTHORIZED BY: [illegible]
PERCENT MOISTURE: (Not Decanted) ~~100~~ NA
UNITS: ug/L or ug/Kg CT 4/2/96

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: NA
GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
120-83-2	2,4-Dichlorophenol	U	1000
120-82-1	1,2,4-Trichlorobenzene	U	500
91-20-3	Napthalene	U	500
106-47-8	4-Chloroaniline	U	500
87-68-3	Hexachlorobutadiene	U	500
59-50-7	4-Chloro-3-methylphenol	U	1000
91-57-5	2-Methylnapthalene		
77-47-4	Hexachlorocyclopentadiene	U	500
88-06-2	2,4,6-Trichlorophenol	U	1000
95-95-4	2,4,5-Trichlorophenol	U	1000
91-58-7	2-chloronaphthalene	U	500
88-74-4	2-Nitroaniline	U	500
131-11-3	Dimethylphthalate	U	500
208-96-8	Acenaphthalene	U	500
99-09-2	3-Nitroaniline	U	500

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
62-75-9	N-Nitrosodimethylamine	U	500
206-44-0	Fluoranthene	U	500
129-00-0	Pyrene	U	500
85-68-7	Butylbenzylphthalene	U	500
91-94-1	3,3'-Dichlorobenzidine	U	500
56-55-3	Benzo(a)Anthracene	U	500
117-81-7	bis(2-ethylhexyl)phthalate	1710	500
218-01-9	Chrysene	119 J	500
117-84-0	Di-n-octylphthalate	U	500
205-99-2	Benzo(b)fluoranthene	U	500
50-32-8	Benzo(a)pyrene	U	500
193-39-5	Indeno(1,2,3-cd)pyrene	U	500
53-70-3	Dibenzo(a,b)anthracene	U	500
191-24-2	Benzo(g,h,i)perylene	U	500
92-87-5	Benzidine	U	500

Vs _____ or Wg 0.1 Vf 10000 Vi 2

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM SV-1B (9/91) revised 7/92, 1/93

ATTACHMENT TT-15

SEMIVOLATILE ORGANIC COMPOUNDS - PESTICIDES/PCB ANAYSIS DATA SHEET

TASKS II & III

Sample: PW-2

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230180

SAMPLE MATRIX: LIQUID (NON-AQUEOUS)

EXTRACTION METHOD: WASTE DILUTION

CONC./DIL/ FACTOR: 1

DATA RELEASE AUTHORIZED BY: [signature]

PERCENT MOISTURE: (Not Decanted) NA

CONCENTRATION: LOW HIGH (CIRCLE ONE)

(circle one) ug/L ug/Kg

CASE NUMBER:

QC REPORT No:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/04/96

DATE ANALYZED: 03/31/96

GPC CLEANUP: YES NO (circle one) pH: NA

CAS NO.	COMPOUND	SAMPLE	MDL
309-00-2	Aldrin	ul	50
319-84-6	Alpha-BHC	ul	50
319-85-7	Beta-BHC	ul	50
319-86-8	Delta-BHC	ul	50
58-89-9	Gamma-BHC	ul	50
5103-71-9	Alpha-Chlordane		
5103-74-2	Gamma-Chlordane		
57-74-9	Tech. Chlordane	ul	500
60-57-1	Dieldrin	ul	100
959-98-8	Endosulfan I	ul	50
33213-65-9	Endosulfan II	ul	100
1031-07-8	Endosulfan Sulfate	ul	100
72-20-8	Endrin	ul	100
7421-93-4	Endrin Aldehyde	ul	100
53494-70-5	Endrin Ketone		
76-44-8	Heptachlor	ul	50
1024-57-3	Heptachlor Epoxide	ul	50
72-43-5	Methoxychlor		
72-54-8	4,4'-DDD	ul	100
72-55-9	4,4'-DDE	ul	100
50-29-3	4,4'-DDT	ul	100

CAS NO.	COMPOUND	SAMPLE	MDL
8001-35-2	Toxaphene	ul	5000
12674-11-2	Aroclor 1016	ul	1000
11104-28-2	Aroclor 1221	ul	2000
11141-16-5	Aroclor 1232	ul	1000
53469-21-9	Aroclor 1242	ul	1000
12672-29-6	Aroclor 1248	ul	1000
11097-69-1	Aroclor 1254	ul	1000
11096-82-5	Aroclor 1260	ul	1000
15972-60-8	Alachlor		
1912-24-9	Atrazine		
1897-45-6	DCPA (Dacthal)		
2593-15-9	Etridiazole		
118-74-1	Hexachlorobenzene		
77-74-4	Hexachlor(1)		
5103-73-1	cis-Nonachlor		
39765-80-5	trans-Nonachlor		
52645-53-1	cis-Permethrin		
52645-53-1	trans-Permethrin		
1918-16-7	Propachlor		
122-34-9	Simizine		
1582-0908	Trifluralin		

Vs _____ or Wg 1.0 Vf 10,000 Vi 1.0

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

Hexachlor(1) = Hexachlorcyclopentadiene

NJDEPE FORM P-1 (9/91) revised 7/92, 1/93

ATTACHMENT TT-16

GENERAL ANALYSIS DATA SHEET

Sample: PW-2

LABORATORY NAME: ICM

LAB SAMPLE ID No: 230180

SAMPLE MATRIX: Liquid (non-aqueous)

EXTRACTION METHOD: SW 846 CHPT 7

ANALYTICAL METHOD #: 9010

PERCENT MOISTURE: (Not Decanted) ~~0.0~~ NA

DATA RELEASE AUTHORIZED BY: [signature] CT 4/4/96

DECANTED: YES / NO (circle one)

CASE NUMBER:

CONTRACT No: X26174

DATE SAMPLE RECEIVED: 02/28/96

DATE EXTRACTED/PREPARED: 03/01/96

DATE ANALYZED: 03/01/96

CONC./DIL/ FACTOR: 1.00

SAMPLE WT/VOL: 10g

PARAMETER	SAMPLE CONC. (UNITS:) mg/kg	METHOD BLANK (UNITS:) mg/kg	METHOD DETECTION LIMITS
Reactive Cyanide	U	U	0.20

VS_____ or Wg_____ VF_____ Vi_____

Vs = volume of water extracted (mL) VF = volume of total extract (uL)

Wg = Weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM G-1 (9/91)

ATTACHMENT TT-17

INORGANIC ANAYSIS DATA SHEET

Sample: PW-2

LABORATORY NAME: ICM

LAB FILE ID: 230180 pH: NA

SAMPLE MATRIX: Liquid / Non-Aqueous

DILUTION FACTOR: ICP/Fu 50 ; Hg 200

UNITS: ug/L or mg/Kg (circle one)

CONTRACT No: X26174

PROJECT NO: PA022796

DATE SAMPLE RECEIVED: 02/28/96

PERCENT MOISTURE: ~~0.0~~ NA CT 4/2/96

ANALYTE	CONC. RESULTS	Q	M	MDL
ALUMINUM				
ANTIMONY	<3.0			3.0
ARSENIC	0.62			0.20
BARIUM				
BERYLLIUM	<0.25			0.25
CADMIUM	<0.25			0.25
CALCIUM				
CHROMIUM	<0.50			0.50
COBALT				
COPPER	3.7			1.2
CYANIDE				
IRON				
LEAD	0.33			0.20
MAGNESIUM				
MANGANESE				
MERCURY	<0.10			0.10
NICKEL	1.5			1.2
POTASSIUM				
SELENIUM	0.22			0.20
SILVER	<0.50			0.50
SODIUM				
THALLIUM	<0.20			0.20
VANADIUM				
ZINC	2.0			1.0

NJDEP FORM M-1 (12/94)

ATTACHMENT TT-18

ORGANICS ANALYSIS DATA SHEET
TASK III

ICS

Sample
TB---

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230192
SAMPLE MATRIX: AQUEOUS
CONC/DIL FACTOR: 1.0
RELEASE AUTHORIZED BY: [illegible]
CONCENTRATION: LOW HIGH (circle one)
PERCENT MOISTURE: (Not Decanted) 100

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
DATE EXTRACTED/PREPARED: NA
DATE ANALYZED: 03/01/96
UNITS: ug/L or ug/Kg
pH: ____

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
74-87-3	Chloromethane	U	5
74-83-9	Bromomethane	U	5
75-01-4	Vinyl Chloride	U	5
75-00-3	Chloroethane	U	5
75-09-2	Methylene Chloride	U	5
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
75-35-4	1,1-Dichloroethene	U	5
75-34-3	1,1-Dichloroethane	U	5
156-60-5	trans-1,2-Dichloroethene	U	5
67-66-4	Chloroform	U	5
107-06-2	1,2-Dichloroethane	U	5
78-93-3	2-Butanone		
71-55-6	1,1,1-Trichloroethane	U	5
56-23-5	Carbon Tetrachloride	U	5
108-05-4	Vinyl Acetate		
75-27-4	Bromodichloromethane	U	5
75-69-4	Trichlorofluoromethane	U	5
1634-04-4	tert-Butylmethylether		
74-95-3	Dibromomethane		
563-58-6	1,1-Dichloropropene		
96-18-4	1,2,3-Trichloropropane		
78-87-5	1,2-Dichloropropane	U	5
95-50-1	1,2-Dichlorobenzene		

CAS NO.	COMPOUND	SAMPLE RESULTS
541-73-1	1,3-Dichlorobenzene	
106-46-7	1,4-Dichlorotoluene	
78-87-5	1,2-Dichloropropene	
10061-02-6	trans-1,3-Dichloropropene	U
79-01-6	Trichloroethene	U
124-48-1	Dibromochloromethane	U
79-00-5	1,1,2-Trichloroethane	U
71-43-2	Benzene	U
10061-01-5	cis-1,3-Dichloropropene	U
110-75-8	2-Chloroethylvinylether	
75-25-2	Bromoform	U
108-10-1	4-Methyl-2-pentanone	
591-87-5	2-Hexanone	
127-18-4	Tetrachloroethene	U
79-34-5	1,1,2,2-Tetrachloroethane	U
108-88-3	Toluene	U
108-90-7	Chlorobenzene	U
100-41-4	Ethylbenzene	U
100-42-5	Styrene	
108-20-3	Diisopropyl Ether	
95-49-8	2-Chlorotoluene	
108-41-8	3-Chlorotoluene	
106-43-4	4-Chlorotoluene	
1330-20-7	Total Xylenes	U

Vs 5 or Wg ____ Vf 5000 Vi 5000

NJDEPE FORM VOA-1 (9/91)
revised 7/92, 1/93

Vs = volume of water extracted (mL) Vf = volume of total extract (u
Wg = Weight of sample extracted (g) Vi = volume of extract injec

ATTACHMENT TT-19

ORGANICS ANALYSIS DATA
TASK III

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230191
SAMPLE MATRIX: AQUEOUS
CONC/DIL FACTOR: 1.0
RELEASE AUTHORIZED BY: [illegible]
CONCENTRATION: LOW HIGH (circle one)
PERCENT MOISTURE: (Not Decanted) 100

NICS

Sampl
FB---

CASE NUMBER:
CONTRACT No: X26174
DATE SAMPLE RECEIVED: 02/28/96
DATE EXTRACTED/PREPARED: NA
DATE ANALYZED: 03/01/96
UNITS: ug/L or ug/Kg
pH:

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
74-87-3	Chloromethane	U	5
74-83-9	Bromomethane	U	5
75-01-4	Vinyl Chloride	U	5
75-00-3	Chloroethane	U	5
75-09-2	Methylene Chloride	U	5
67-64-1	Acetone		
75-15-0	Carbon Disulfide		
75-35-4	1,1-Dichloroethene	U	5
75-34-3	1,1-Dichloroethane	U	5
156-60-5	trans-1,2-Dichloroethene	U	5
67-66-4	Chloroform	U	5
107-06-2	1,2-Dichloroethane	U	5
78-93-3	2-Butanone		
71-55-6	1,1,1-Trichloroethane	U	5
56-23-5	Carbon Tetrachloride	U	5
108-05-4	Vinyl Acetate		
75-27-4	Bromodichloromethane	U	5
75-69-4	Trichlorofluoromethane	U	5
1634-04-4	tert-Butylmethylether		
74-95-3	Dibromomethane		
563-58-6	1,1-Dichloropropene		
96-18-4	1,2,3-Trichloropropane		
78-87-5	1,2-Dichloropropane	U	5
95-50-1	1,2-Dichlorobenzene		

CAS NO.	COMPOUND	SAMPLE RESULTS	
541-73-1	1,3-Dichlorobenzene		
106-46-7	1,4-Dichlorotoluene		
78-87-5	1,2-Dichloropropene		
10061-02-6	trans-1,3-Dichloropropene	U	5
79-01-6	Trichloroethene	U	5
124-48-1	Dibromochloromethane	U	5
79-00-5	1,1,2-Trichloroethane	U	5
71-43-2	Benzene	U	5
10061-01-5	cis-1,3-Dichloropropene	U	5
110-75-8	2-Chloroethylvinylether		
75-25-2	Bromoform	U	5
108-10-1	4-Methyl-2-pentanone		
591-87-5	2-Hexanone		
127-18-4	Tetrachloroethene	U	5
79-34-5	1,1,2,2-Tetrachloroethane	U	5
108-88-3	Toluene	U	5
108-90-7	Chlorobenzene	U	5
100-41-4	Ethylbenzene	U	5
100-42-5	Styrene		
108-20-3	Diisopropyl Ether		
95-49-8	2-Chlorotoluene		
108-41-8	3-Chlorotoluene		
106-43-4	4-Chlorotoluene		
1330-20-7	Total Xylenes	U	5

Vs 5 or Wg _____ Vf 5000 Vi 5000

NJDEPE FORM VOA-1 (9/91)
revised 7/92, 1/93

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = Weight of sample extracted (g) Vi = volume of extract injected (u

ATTACHMENT TT-20

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: FB

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230181
SAMPLE MATRIX: Aqueous
CONC./DILUTION FACTOR: 1.0
CONCENTRATION: LOW HIGH (circle one)
TYPE OF EXTRACTION: SEPERATORY FUNNEL

DATE SAMPLE RECEIVED: 2/28/96
DATE EXTRACTED/PREPARED: 3/1/96
DATE ANALYZED: 3/7/96
DATA RELEASE AUTHORIZED BY: [illegible]
PERCENT MOISTURE: (Not Decanted) 100
UNITS: ug/L or ug/Kg

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: 6.66
GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
108-95-2	Phenol	U	10
111-44-4	bis(2-Chloroethyl)ether	U	5
95-57-8	2-Chlorophenol	U	10
541-73-1	1,3-Dichlorobenzene	U	5
106-46-7	1,3-Dichlorobenzene	U	5
100-51-6	Benzyl Alcohol	U	5
95-50-1	1,2-Dichlorobenzene	U	5
95-48-7	2-Methylphenol	U	10
108-60-1	bis(2-Chlorophenylisopropyl)ether	U	5
106-44-5	4-Methylphenol	U	10
621-64-7	N-Nitroso-di-n-propylamine	U	5
67-72-1	Hexachloroethane	U	5
98-95-3	Nitrobenzene	U	5
78-50-1	Isophorone	U	5
88-75-5	2-Nitrophenol	U	10
105-67-5	2,4-Dimethylphenol	U	10
65-85-0	Benzoic Acid	U	10
111-91-1	bis(2-chloromethoxy)methane	U	5

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
83-32-9	Acenaphthene	U	5
51-28-5	2,4-Dinitrophenol	U	10
100-02-7	4-Nitrophenol	U	10
132-64-9	Dibenzofuran	U	
121-14-2	2,4-Dinitrotoluene	U	5
606-20-2	2,6-Dinitrotoluene	U	5
84-66-2	Diethylphthalate	U	5
7005-72-3	4-Chlorophenyl-phenylether	U	5
86-73-7	Fluorene	U	5
100-01-6	4-Nitroaniline	U	5
534-52-1	4,6-Dinitro-2-methylphenol	U	10
86-30-6	N-Nitrosodiphenylamine (1)	U	5
101-55-3	4-Bromophenyl-phenylether	U	5
118-74-1	Hexachlorobenzene	U	5
87-86-5	Pentachlorophenol	U	10
85-01-8	Phenanthrene	U	5
120-12-7	Anthracene	U	5
84-74-2	Di-n-butylphthalate	U	5

Vs: 1000 or Wg _____ Vt 1000 Vi 2

(1) Can not be separated from Diphenylamine

Vs = volume of water extracted (mL) Vt = volumne of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM SV-1A (9/91) revised 1/93

737

ORGANICS ANALYSIS DATA SHEET- SEMIVOLATILE COMPOUNDS

Sample: FB

LABORATORY NAME: ICM
LAB SAMPLE ID No: 230181
SAMPLE MATRIX: Aqueous
CONC/DIL FACTOR: 1.0
CONCENTRATION: LOW HIGH (circle one)
TYPE OF EXTRACTION: SEPERATORY FUNNEL

DATE SAMPLE RECEIVED: 2/28/96
DATE EXTRACTED/PREPARED: 3/1/96
DATE ANALYZED: 3/7/96
DATA RELEASE AUTHORIZED BY: [illegible]
PERCENT MOISTURE: (Not Decanted) 100
UNITS: ug/L or ug/Kg

CASE NUMBER:
QC REPORT No:
CONTRACT No: X26174
pH: 6.6-6.6
GPC CLEANUP: YES NO (circle one)

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
120-83-2	2,4-Dichlorophenol	U	10
120-82-1	1,2,4-Trichlorobenzene	U	5
91-20-3	Napthalene	U	5
106-47-8	4-Chloroaniline	U	5
87-68-3	Hexachlorobutadiene	U	5
59-50-7	4-Chloro-3-methylphenol	U	10
91-57-5	2-Methylnapthalene		
77-47-4	Hexachlorocyclopentadiene	U	5
88-06-2	2,4,6-Trichlorophenol	U	10
95-95-4	2,4,5-Trichlorophenol	U	10
91-58-7	2-chloronaphthalene	U	5
88-74-4	2-Nitroaniline	U	5
131-11-3	Dimethylphthalate	U	5
208-96-8	Acenaphthalene	U	5
99-09-2	3-Nitroaniline	U	5

CAS NO.	COMPOUND	SAMPLE RESULTS	MDL
62-75-9	N-Nitrosodimethylamine	U	5
206-44-0	Fluoranthene	U	5
129-00-0	Pyrene	U	5
85-68-7	Butylbenzylphthalene	U	5
91-94-1	3,3'-Dichlorobenzidine	U	5
56-55-3	Benzo(a)Anthracene	U	5
117-81-7	bis(2-ethylhexyl)phthalate	U	5
218-01-9	Chrysene	U	5
117-84-0	Di-n-octylphthalate	U	5
205-99-2	Benzo(b)fluoranthene	U	5
50-32-8	Benzo(a)pyrene	U	5
193-39-5	Indeno(1,2,3-cd)pyrene	U	5
53-70-3	Dibenzo(a,h)anthracene	U	5
191-24-2	Benzo(g,h,i)perylene	U	5
92-87-5	Benzidine	U	5

Vs 1000 or Wg ____ Vf 1000 Vi 2

Vs = volume of water extracted (mL) Vf = volume of total extract (uL)
Wg = weight of sample extracted (g) Vi = volume of extract injected (uL)

NJDEPE FORM SV-1B (9/91) revised 7/92, 1/93

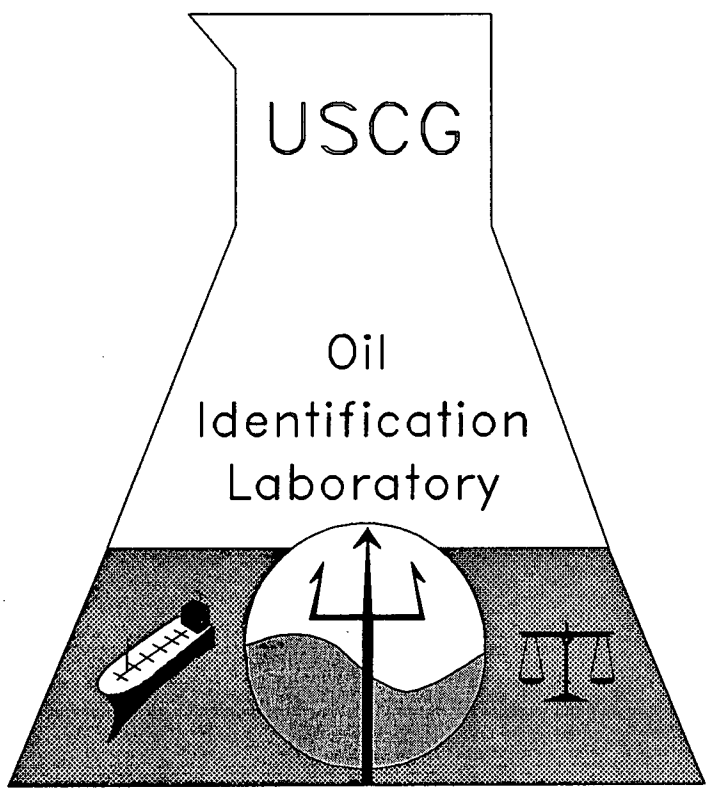
ATTACHMENT II-22

ATTACHMENT UU

OIL SAMPLE ANALYSIS REPORT

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
CASE NUMBER N/A

MARINE SAFETY LABORATORY
CASE NUMBER 96-194



ATTACHMENT UU-1

U.S. Department
of Transportation

United States
Coast Guard

Commanding Officer
U. S. Coast Guard
Marine Safety
Laboratories

1082 Shennecossett Road
Groton, CT 06340-6094
Phone: (860) 441-2645
Fax: (860) 441-2641

16400
MAR 8 1996

From: Commanding Officer, Marine Safety Laboratories
To: Mr. John Usmiani, New Jersey Dept of Environmental Protection

Subj: OIL SAMPLE ANALYSIS REPORT, NJDEP CASE# N/A
MSL CASE #96-194

1. The laboratory analysis of this case has been completed and our report is forwarded. The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request. We will maintain the oil samples in refrigerated storage pending final case disposition.

2. Questions concerning this report or the analytical methods used should be directed to the Supervisor of Analysis, Dr. Hendrick.

Marshall Hendrick

M. S. HENDRICK
By direction

Encl: (1) MSL Report 96-194
(2) OIS Addendum

ATTACHMENT UU-2

UNITED STATES COAST GUARD MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

OIL SPILL IDENTIFICATION REPORT

LABORATORY CASE NUMBER: 96-194

REQUESTOR: NEW JERSEY D.E.P.
UNIT CASE NUMBER: N/A
RECEIVED: 04FEB96 **VIA:** FEDERAL EXPRESS (# 610 622 8715)

NUMBER OF SAMPLES: FIVE (05)
LAB NO. OF SUSPECTS: 1 THROUGH 5

SPECIAL INSTRUCTIONS:

1. Compare the sample submitted with samples from Case 96-145.

ANALYSIS METHODS:

GAS CHROMATOGRAPHY (GC)

RESULTS:

1. Samples 96-194-1 through 5 were specified to have been representative of samples submitted for fingerprinting. Analysis indicates they are similar and contain a severely biodegraded heavy fuel oil resembling a bunker fuel oil that has undergone varying degrees of evaporative weathering. The characteristics of these samples are similar to those of samples 96-145-1,2,4,5,6,7,8,9,10,11 and 12.

CONCLUSIONS:

1. Samples 96-194-1 through 5 and 96-194-1,2,4,5,6,7,8,9,10,11 and 12 appear to contain a heavy fuel oil derived from a common source. Biodegradation, to the extent noted in these samples, is typical of oil retained in a contaminated environment for an extended period of time.

Martha S Hendrick

SUPERVISOR OF ANALYSIS M. S. HENDRICK, Ph.D. **DATE:** 08MAR96
Chemist

ATTACHMENT UU-3

11/89

UNITED STATES COAST GUARD
OIL IDENTIFICATION LABORATORY

SAMPLE CHECK-IN LOG, COIL CASE NUMBER: 96-194

REQUESTOR: NEW JERSEY D. E. P. UNIT CASE#: N/A

METHOD OF DELIVERY				DATE RECEIVED
FEDERAL EXPRESS		MESSENGER	OTHER	
NUMBER	DATE MAILED O/A			
610 622 8715	01 MAR 96			04 MAR 96

Samples were observed to be: broken NO, tampered with NO, leaking YES, or subject to contamination NO. For these and other unusual conditions, place an asterisk (*) next to the sample(s) in question and describe condition of sample(s) in remarks below.

LAB NO.	SAMPLE DESCRIPTION	SPILL	SUSPECT
** 96-194-1	[BEC-ID] BEC-ID		XXXXX
** 96-194-2	[NJ-15] NJ-15		XXXXX
96-194-3	[NJ-20] NJ-20		XXXXX
** 96-194-4	[PW1-A] PW1-A		XXXXX
** 96-194-5	[PW3] PW3		XXXXX

REMARKS:
**SAMPLES 96-194-1, 96-194-2, 96-194-4, AND 96-194-5 WERE RECEIVED LEAKING.
****COMPARE TO CASE #96-145****

Samples checked-in by: James P. Briggs Date: 05 MAR 96

Sample Custodian: [illegible] Date: 08 MAR 96

Supervisor of Analysis: Marthas Hendrick Date: 08 Mar 96

ATTACHMENT UU-4

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

QUALITY CONTROL SHEET

MSL CASE NUMBER: 96-194 DATE PREPARED: 05 MAR 96

A Quality Control (QC) sample was analyzed along with the samples of the case.

[X] The Quality Control (QC) sample is a duplicate of sample 96-194-01.

[ ] Due to limited sample quantity in all samples of the case, reference oil _____ from the MSL oil library was used for the Quality Control (QC) and Quality Control Match (QCM) samples.

[ ] Infrared Spectroscopy was used as a screening method before final sample preparation. No QC sample was available during IR screening.

ANALYTICAL METHODS

	SAT	N/A
INFRARED SPECTROSCOPY (IR)		X
GAS CHROMATOGRAPHY (GC)	X	
FLUORESCENCE SPECTROSCOPY (FL)		X
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC-MS)		X

The data and conclusions for the QC and QCM samples were identical: YES X NO ____

Comments:

SUPERVISOR OF ANALYSIS: Marshall Hendrick DATE: 08 Mar 96
Revised 2/96

ATTACHMENT UU-5

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

SAMPLE PREPARATION SHEET

MSL CASE NUMBER: 96-194 DATE PREPARED: 05 MAR 96

Oil samples were prepared using techniques listed below. The prepared samples were then placed into a separate vial and identified with the MSL case number and sample number along with the corresponding preparation code(s).

Oil samples eliminated by IR screening method: _____

The Quality Control sample is a duplicate of sample: 96-194-01

SAMPLE NUMBERS (sequential portion only)	PREPARATION CODE	RATIO*
01, 03, 04, 05, QC	2	
02	5, 7	

PREPARATION CODES

1. Portion of neat sample taken from sample jar (clean fuel oils).
2. Portion of sample taken from sample jar, anhydrous $MgSO_4$ added, then centrifuged.
3. Portion of sample taken from sample jar, diluted with cyclohexane, anhydrous $MgSO_4$ added, then centrifuged.
4. Entire sample extracted with cyclohexane, anhydrous $MgSO_4$ added, then centrifuged.
5. Entire sample extracted with two separate 10 mL portions of cyclohexane, anhydrous $MgSO_4$ added to the combined cyclohexane solution, then centrifuged.
6.* Cyclohexane solution: ratio of oil to cyclohexane is known and shown in "ratio" column.
7. Cyclohexane solution of unknown concentration.
8. Solvent evaporated with heat and a stream of N_2. Sample of unknown concentration.
9. Other: _____

Preparer's Signature: Kenneth J Zocho Date: 05 MAR 96
Revised 2/96

ATTACHMENT UU-6

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORY

OIL SPILL IDENTIFICATION ANALYSES
COST RECOVERY DOCUMENTATION

LABORATORY CASE NUMBER: 96-194

REQUESTOR: NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

UNIT CASE NUMBER: N/A

NUMBER OF SAMPLES: 05

COST PER SAMPLE PREPARED: $20.00

TOTAL COSTS OF SAMPLE PREPARATION: $100.00

NUMBER OF ANALYSES: 18

COST PER ANALYSIS: $85.98

TOTAL COSTS FOR ANALYSIS: $1547.64

TOTAL COSTS: $1647.64

This documentation is provided for purposes of Phase IV - Documentation and Cost Recovery under the National Oil and Hazardous Substances Pollution Contingency Plan(40 CFR Part 300).

Martha S Hendrick

MARTHA S. HENDRICK DATE: 8MAR96
Chemist

ATTACHMENT UU-7

UNITED STATES COAST GUARD MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

OIL SPILL IDENTIFICATION REPORT

LABORATORY CASE NUMBER: 96-145

REQUESTOR: NEW JERSEY DEP
UNIT CASE NUMBER:
RECEIVED: 01FEB96 **VIA:** FEDERAL EXPRESS (# 4007183110)

NUMBER OF SAMPLES: TWELVE (12)
LAB NO. OF SUSPECTS: 1 THROUGH 12

ANALYSIS METHODS:

GAS CHROMATOGRAPHY (GC)

RESULTS:

1. Samples 1 through 12 were specified to have been representative of samples submitted for fingerprinting. Analysis indicates:

a. Samples 2,4,5,6,7,8,9,10,11 and 12 are similar and contain a severely biodegraded heavy fuel oil resembling a bunker fuel oil. Of these samples, samples 10,11 and 12 contain a contaminant that is not typically observed in petroleum oil. Samples 8 and 9 contain lower concentrations of the same contaminant.

b. Sample 1 contains only traces of a severely biodegraded heavy fuel oil resembling a bunker fuel oil. The characteristics of this sample are similar to those of samples 2,4,5,6,7,8,9,10,11 and 12.

c. Sample 3 does not contain a quantity of petroleum oil sufficient for fingerprinting by Gas Chromatography.

CONCLUSIONS:

1. Samples 1,2,4,5,6,7,8,9,10,11 and 12 contain a heavy fuel oil derived from a common source. Biodegradation, to the extent noted in these samples, is typical of oil retained in a contaminated environment for an extended period of time. The contaminant noted in samples 8,9,10,11 and 12 may be present in the other samples as well, but it is not possible to detect above the background of the unresolved envelope of the petroleum oil. The identity of the contaminant was not determined.

Martha S Hendrick

SUPERVISOR OF ANALYSIS M. S. HENDRICK, Ph.D. **DATE:** 06FEB96
Chemist

ATTACHMENT UU-8

U.S. Department
of Transportation

United States
Coast Guard

Commanding Officer
U. S. Coast Guard
Marine Safety
Laboratories

1082 Shennecossett Road
Groton, CT 06340-6094
Phone: (860) 441-2645
Fax: (860) 441-2641

16400

FEB 6 1996

From: Commanding Officer, Marine Safety Laboratories
To: Mr. John I. Usmiani New Jersey Dept of Environmental Protection

Subj: OIL SAMPLE ANALYSIS REPORT, MSL CASE #96-145

1. The laboratory analysis of this case has been completed and our report is forwarded. The technical data supporting the report (spectrograms and chromatograms) have been archived at our facility and are available upon request. We will maintain the oil samples in refrigerated storage pending final case disposition.

2. Questions concerning this report or the analytical methods used should be directed to the Supervisor of Analysis, Dr. Hendrick.

Marshall Hendrick

M. S. HENDRICK
By direction

Encl: (1) MSL Report 96-145
(2) OIS Addendum

ATTACHMENT UU-9

UNITED STATES COAST GUARD MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

OIL SPILL IDENTIFICATION REPORT

LABORATORY CASE NUMBER: 96-145

REQUESTOR: NEW JERSEY DEP
UNIT CASE NUMBER:
RECEIVED: 01FEB96 **VIA:** FEDERAL EXPRESS (# 4007183110)

NUMBER OF SAMPLES: TWELVE (12)
LAB NO. OF SUSPECTS: 1 THROUGH 12

ANALYSIS METHODS:

GAS CHROMATOGRAPHY (GC)

RESULTS:

1. Samples 1 through 12 were specified to have been representative of samples submitted for fingerprinting. Analysis indicates:

a. Samples 2,4,5,6,7,8,9,10,11 and 12 are similar and contain a severely biodegraded heavy fuel oil resembling a bunker fuel oil. Of these samples, samples 10,11 and 12 contain a contaminant that is not typically observed in petroleum oil. Samples 8 and 9 contain lower concentrations of the same contaminant.

b. Sample 1 contains only traces of a severely biodegraded heavy fuel oil resembling a bunker fuel oil. The characteristics of this sample are similar to those of samples 2,4,5,6,7,8,9,10,11 and 12.

c. Sample 3 does not contain a quantity of petroleum oil sufficient for fingerprinting by Gas Chromatography.

CONCLUSIONS:

1. Samples 1,2,4,5,6,7,8,9,10,11 and 12 contain a heavy fuel oil derived from a common source. Biodegradation, to the extent noted in these samples, is typical of oil retained in a contaminated environment for an extended period of time. The contaminant noted in samples 8,9,10,11 and 12 may be present in the other samples as well, but it is not possible to detect above the background of the unresolved envelope of the petroleum oil. The identity of the contaminant was not determined.

Martha S Hendrick

SUPERVISOR OF ANALYSIS M. S. HENDRICK, Ph.D. DATE: 06FEB96
Chemist

ATTACHMENT UU-10

U. S. COAST GUARD MARINE SAFETY LABORATORIES

MSL CASE #: 96-145 **REQUESTOR:** NEW JERSEY DEP

DATE RECEIVED: 01-Feb-96 **UNIT CASE #:** **FPN:**

METHOD OF DELIVERY: FED EX **TRACKING #:** 4007183110

MSL #	*DESCRIPTION*	*DATE/TIME TAKEN*	*SPILL*	*SOURCE*
96-145-1	NJ-21	30 JAN 96 1030		XXX
96-145-2	NJ-23	30 JAN 96 1030		XXX
96-145-3	NJ-2A	30 JAN 96 1030		XXX
96-145-4	NJ-6A	30 JAN 96 1030		XXX
96-145-5	NJ-6B	30 JAN 96 1030		XXX
96-145-6	NJ-6C	30 JAN 96 1030		XXX
96-145-7	MWB-2A	30 JAN 96 1030		XXX
96-145-8	MWB-2B	30 JAN 96 1030		XXX
96-145-9	MWB-2C	30 JAN 96 1030		XXX
96-145-10	PW-2A	30 JAN 96 1030		XXX

REMARKS: **** I. D. ONLY ****

Samples checked in by: [signature] Date: 02 FEB 96

Sample Custodian: [signature] Date: 02 FEB 96

Supervisor of analysis: Martha S Hendrick Date: 06 Feb 96

ATTACHMENT UU-11

U. S. COAST GUARD
MARINE SAFETY LABORATORIES

SAMPLE CHECK-IN LOG MSL CASE #: 96-145

MSL #	DESCRIPTION	DATE/TIME TAKEN	SPILL	SOURCE
96-145-11	PW-2B	30 JAN 96 1030		XXX
96-145-12	PW-2C	30 JAN 96 1030		XXX

REMARKS:

Samples checked in by: _____ Date: 02 FEB 96

Sample Custodian: _____ Date: 02 FEB 96

Supervisor of Analysis: Martha S Henderson Date: 06 Feb 96

ATTACHMENT UU-12

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

SAMPLE PREPARATION SHEET

COIL CASE NUMBER: 96-145 DATE PREPARED: 2 Feb 96

Oil samples were obtained using preparation techniques listed below. The samples were then placed into a vial and identified with the COIL case number and sample number along with the corresponding preparation code(s).

Oil samples eliminated by IR screening method: _____

The Quality Control sample is a duplicate of sample: 96-145-10

SAMPLE NUMBERS (sequential portion only)	PREPARATION CODE	RATIO
1, 3	5, 7	
2, 4, 5, 6, 10, 11, 12, QC	2	
7, 8, 9	3, 7	

PREPARATION CODES

1. Portion of neat sample taken from sample jar (clean fuel oils).
2. Portion of sample taken from sample jar, anhydrous $MgSO_4$ added, then centrifuged.
3. Portion of sample taken from sample jar, diluted with cyclohexane, anhydrous $MgSO_4$ added, then centrifuged.
4. Entire sample extracted with cyclohexane, anhydrous $MgSO_4$ added, then centrifuged.
5. Entire sample extracted with two separate 10 ml portions of cyclohexane, anhydrous $MgSO_4$ added to the combined cyclohexane solution, then centrifuged.
6. Cyclohexane Solution: ratio of oil to cyclohexane is known and shown in "ratio" column.
7. Cyclohexane Solution of unknown concentration.
8. Solvent evaporated with heat and a stream of N_2. Sample of unknown concentration.
9. Others: _____

Preparer's Signature: Kenneth [illegible] Date: 2 Feb 96

Revised 4/95

ATTACHMENT UU-13

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

QUALITY CONTROL SHEET

COIL CASE NUMBER: 96-145 DATE PREPARED: 2 Feb 96

1. A Quality Control (QC) sample was analyzed along with the other samples in this case.

X The Quality Control (QC) is a duplicate of sample 96-145-10

____ Due to limited sample quantity in all samples involved in the case, reference oil _____ from the COIL Library was used for the Quality Control (QC) and it's duplicate sample.

____ Infrared Spectroscopy used for screening samples before final sample preparation. No QC sample available during IR screening.

2. **ANALYTICAL METHODS.**

	SAT	N/A
INFRARED SPECTROSCOPY		X
GAS CHROMATOGRAPHY	X	
FLUORESCENCE SPECTROSCOPY		X
GAS CHROMATOGRAPHY/MASS SPECTROMETRY		X

3. The data and conclusions for the QC and it's duplicate were identical:

Yes X No ____

COMMENTS:

SUPERVISOR OF ANALYSIS: Martha S Hardwick DATE: 26 Feb 96

3/95

ATTACHMENT UU-14

UNITED STATES COAST GUARD MARINE SAFETY LABORATORIES
OIL IDENTIFICATION LABORATORY

OIL SPILL IDENTIFICATION REPORT

LABORATORY CASE NUMBER: 96-145

REQUESTOR: NEW JERSEY DEP
UNIT CASE NUMBER:
RECEIVED: 01FEB96 **VIA:** FEDERAL EXPRESS (# 4007183110)

NUMBER OF SAMPLES: TWELVE (12)
LAB NO. OF SUSPECTS: 1 THROUGH 12

ANALYSIS METHODS:

GAS CHROMATOGRAPHY (GC)

RESULTS:

1. Samples 1 through 12 were specified to have been representative of samples submitted for fingerprinting. Analysis indicates:

a. Samples 2,4,5,6,7,8,9,10,11 and 12 are similar and contain a severely biodegraded heavy fuel oil resembling a bunker fuel oil. Of these samples, samples 10,11 and 12 contain a contaminant that is not typically observed in petroleum oil. Samples 8 and 9 contain lower concentrations of the same contaminant.

b. Sample 1 contains only traces of a severely biodegraded heavy fuel oil resembling a bunker fuel oil. The characteristics of this sample are similar to those of samples 2,4,5,6,7,8,9,10,11 and 12.

c. Sample 3 does not contain a quantity of petroleum oil sufficient for fingerprinting by Gas Chromatography.

CONCLUSIONS:

1. Samples 1,2,4,5,6,7,8,9,10,11 and 12 contain a heavy fuel oil derived from a common source. Biodegradation, to the extent noted in these samples, is typical of oil retained in a contaminated environment for an extended period of time. The contaminant noted in samples 8,9,10,11 and 12 may be present in the other samples as well, but it is not possible to detect above the background of the unresolved envelope of the petroleum oil. The identity of the contaminant was not determined.

Martha S Hendrick

SUPERVISOR OF ANALYSIS M. S. HENDRICK, Ph.D. **DATE:** 06FEB96
Chemist

ATTACHMENT UU-15

UNITED STATES COAST GUARD
MARINE SAFETY LABORATORY

OIL SPILL IDENTIFICATION ANALYSES
COST RECOVERY DOCUMENTATION

LABORATORY CASE NUMBER: 96-145

REQUESTOR: NJ DEPT OF ENVIRONMENTAL PROTECTION

UNIT CASE NUMBER: NONE

NUMBER OF SAMPLES: 12

COST PER SAMPLE PREPARED: $20.00

TOTAL COSTS OF SAMPLE PREPARATION: $240.00

NUMBER OF ANALYSES: 13

COST PER ANALYSIS: $85.98

TOTAL COSTS FOR ANALYSIS: $1105.00

TOTAL COSTS: $1345.00

This documentation is provided for purposes of Phase IV - Documentation and Cost Recovery under the National Oil and Hazardous Substances Pollution Contingency Plan(40 CFR Part 300).

Martha S Hendrick

MARTHA S. HENDRICK DATE: 6FEB96
Chemist

ATTACHMENT UU-16.

UNITED STATES COAST GUARD

OIL SPILL IDENTIFICATION SYSTEM (OIS)

RELEVANCE TO SPILL SOURCE DETERMINATION

Petroleum is a complex mixture of thousands of different organic compounds formed from a variety of organic materials that are chemically converted under differing geological conditions over long periods of time. The infinitely variable nature of these factors results in distinct chemical differences between oils formed under dissimilar conditions and/or environments. While oil from one crude oil field is readily distinguishable from another, differences in the makeup of oils from the same crude oil field can sometimes be observed as well. Refined oils are fractions usually derived by distillation of crude oil. Two refined oils of the same type differ because of dissimilarities in the characteristics of their crude oil feed stocks as well as variations in refinery processes and any subsequent contact with other oils mixed in during transfer operation from residues in tanks, ships, pipes, hoses etc... Thus, all petroleum oils, to some extent have chemical compositions that differ from each other.

The characteristic properties of an oil can be explored by a variety of analytical methods. The results of analysis by any of these methods can be presented in graph form. In general, when the graphical data for two oils produced by a particular method are compared, the differences between the graphs reflect differences between the oils.

The OIS System, developed during the mid-1970s at the Coast Guard Research and Development Center, is based on a multi-method approach to "fingerprinting" oils. In 1978, the Central Oil Identification Laboratory (COIL) was established as the operating facility to implement the OIS. In 1988, COIL was renamed the Marine Safety Laboratories (MSL), though the acronym COIL is still widely used. OIS is designed to determine the unique, intrinsic chemical properties of oils via analytical techniques and establish whether or not a common source relationship exists between samples of spilled oil and samples of oil from a suspected source. Since 1978, MSL/COIL has analyzed over 39,000 samples, involving more than 5,700 spill cases, in support of oil pollution investigations.

DATA PRODUCTION AND INTERPRETATION

Oil sample preparation, testing and storage are conducted in accordance with American Society for Testing and Materials (ASTM) consensus standards. MSL/COIL currently utilizes three primary analytical techniques: Gas Chromatography (GC) (ASTM D-3328), Fluorescence Spectroscopy (FL) (ASTM D 3650), Infrared Spectroscopy (IR) (ASTM D-3414), and Gas Chromatography-Mass Spectrometry (GC-MS) (ASTM D-5739) that is used as a complementary analytical method. A rigorous laboratory quality assurance program monitors both instrument performance and sample preparation to ensure that data are accurate and reproducible.

All samples in a given case are initially analyzed by one method to determine the class of petroleum product. Samples can be excluded from further analysis based on results from the initial analysis. Further analyses are performed on samples which are potential matches to the source of the oil.

The Supervisor of Analysis interprets the data from all test methods performed and draws conclusions concerning whether or not certain spilled oil and suspected source samples were derived from the same chemical source. Data interpretation in oil spill source identification is non-trivial and fundamentally different from typical chemical analyses because the chemical properties of spilled oil are altered when oil is introduced into the environment. From the moment oil enters the environment, evaporation, dissolution, photochemical oxidation, biodegradation and other forces begin to alter the oil's characteristics or "fingerprint". These combined processes are termed weathering and can significantly complicate data interpretation. Contamination of the spilled oil with other oils or substances is another complicating factor. The experienced oil spill analyst is familiar with the complexities of the weathering processes and is able to distinguish real differences between two oils from those apparent differences resulting from weathering alterations. Interferences from contaminants can usually be recognized as such and discounted when weighing the test results. However, at times, severe weathering and/or contamination can mask many of the inherent differences between oils of a similar type.

REPORTING

The typical MSL/COIL OIS Report consists of four parts: case identifying information, a listing of analysis techniques performed, the results section and the conclusions section. The results section describes the types of petroleum observed in the samples provided, and comments on chemical similarities or dissimilarities between spill samples and/or between spill and suspected source samples. In all cases the Supervisor of Analysis bases the written results on interpretations from the aggregate of all data generated.

The conclusions section establishes whether or not a common source relationship exists between samples of spilled oil and samples of oil from a suspected source. There are two outcomes most frequently found in the conclusions section of the typical MSL/COIL OIS Report: "derived from a common source" and "not derived from a common source". However, to maintain the high degree of reliability for both "common source" and "not a common source" determinations, it is necessary to exclude some comparisons from these categories. Oil spill cases vary widely in possible explanations for why a determination could not be made. Instead of using only a statement of "inconclusive", the comments will ~~concisely~~ explain the reason for the outcome for each individual case. For example, some sources are highly inhomogeneous, and a sample of such a spill may not reflect the composition of the product remaining in such a source. The spill may contain very little oil, or it may be excessively weathered or contaminated. Of important note, MSL/COIL conclusions address chemical comparisons and not physical aspects of evidence. Additionally, chemical evidence provided in a MSL/COIL conclusion that is other than "common source" might still be used by the investigating officer, when combined with physical evidence to establish a preponderance of the evidence argument against an alleged responsible party.

ATTACHMENT UU-18

MSL/COIL OIS Reports are submitted to Marine Safety Offices (MSO's) for inclusion, as chemical evidence, in Marine Violation/Casualty Reports. The outcomes in the conclusions section of the OIS Report define the nature of the chemical evidence provided. MSO personnel are advised to combine the chemical evidence provided in the MSL/COIL OIS Reports with physical and circumstantial evidence developed during the investigation when writing Marine Violation Reports. Inquiries challenging the technical content of MSL/COIL OIS Reports by representatives of the alleged responsible party should be handled at the Hearing Officer level. Explicit guidance describing the communications process between the Hearing Officer and the MSL/COIL Supervisor of Analysis on technical issues involving chemical evidence is given in Commandant (G-LMI) memorandum 16460 dated 26 January 1981.

PERSONNEL QUALIFICATIONS

MSL/COIL laboratory technicians performing sample preparation and testing are graduates of the Coast Guard Marine Science Technician School. Each MSL/COIL technician has successfully completed a comprehensive training program at the MSL/COIL facility. Additionally, many have received supplemental training at leading civilian institutions in their specialty area.

The Supervisor of Analysis monitors all aspects of the analysis, certifies and interprets the test results, and prepares the final MSL/COIL report. This individual is a professionally trained chemist experienced in oil spill source identification. Individuals currently qualified to perform this function are:

Lieutenant Commander Kristy L. Plourde, U.S. Coast Guard
Commanding Officer
B.S. Physical Sciences, 1983, US Coast Guard Academy
M.S. Chemistry, 1989, University of Connecticut

Dr. Martha Hendrick
Chemist
B.A. Chemistry, 1969, Rhodes College
M.A. Education, 1974, Stanford University
Ph.D. Analytical Chemistry, 1985, University of Connecticut
Chair, ASTM Subcommittee D19.31, Waterborne Oils

REFERENCES

A more technical description of the OIS is contained in Report CG-D-52-77 "Oil Spill Identification System", Final Report, June 1977, USCG R&D Center. This document is available through the National Technical Information Service, Springfield, VA 22161.

For information concerning the ASTM standards used in Oil Spill Identification, consult "Oil in the Environment", Martha S. Hendrick, Ph.D., ASTM Standardization News, April 1991.

For additional information regarding the applicability of the Coast Guard's OIS, see "Chemical Identification of Oil Spill Sources", Allen P. Bentz, Ph.D., The Forum, Volume XIII, Number 2, Winter 1978. Dr. Bentz is a research scientist at the Coast Guard Research and Development Center and a recognized expert in the field of oil spill source identification. He has been closely involved with most of the development work leading to the present state-of-the-art.

UNITED STATES COAST GUARD

OIL SPILL IDENTIFICATION SYSTEM (OIS)

RELEVANCE TO SPILL SOURCE DETERMINATION

Petroleum is a complex mixture of thousands of different organic compounds formed from a variety of organic materials that are chemically converted under differing geological conditions over long periods of time. The infinitely variable nature of these factors results in distinct chemical differences between oils formed under dissimilar conditions and/or environments. While oil from one crude oil field is readily distinguishable from another, differences in the makeup of oils from the same crude oil field can sometimes be observed as well. Refined oils are fractions usually derived by distillation of crude oil. Two refined oils of the same type differ because of dissimilarities in the characteristics of their crude oil feed stocks as well as variations in refinery processes and any subsequent contact with other oils mixed in during transfer operation from residues in tanks, ships, pipes, hoses etc... Thus, all petroleum oils, to some extent have chemical compositions that differ from each other.

The characteristic properties of an oil can be explored by a variety of analytical methods. The results of analysis by any of these methods can be presented in graph form. In general, when the graphical data for two oils produced by a particular method are compared, the differences between the graphs reflect differences between the oils.

The OIS System, developed during the mid-1970s at the Coast Guard Research and Development Center, is based on a multi-method approach to "fingerprinting" oils. In 1978, the Central Oil Identification Laboratory (COIL) was established as the operating facility to implement the OIS. In 1988, COIL was renamed the Marine Safety Laboratories (MSL), though the acronym COIL is still widely used. OIS is designed to determine the unique, intrinsic chemical properties of oils via analytical techniques and establish whether or not a common source relationship exists between samples of spilled oil and samples of oil from a suspected source. Since 1978, MSL/COIL has analyzed over 39,000 samples, involving more than 5,700 spill cases, in support of oil pollution investigations.

DATA PRODUCTION AND INTERPRETATION

Oil sample preparation, testing and storage are conducted in accordance with American Society for Testing and Materials (ASTM) consensus standards. MSL/COIL currently utilizes three primary analytical techniques: Gas Chromatography (GC) (ASTM D-3328), Fluorescence Spectroscopy (FL) (ASTM D 3650), Infrared Spectroscopy (IR) (ASTM D-3414), and Gas Chromatography-Mass Spectrometry (GC-MS) (ASTM D-5739) that is used as a complementary analytical method. A rigorous laboratory quality assurance program monitors both instrument performance and sample preparation to ensure that data are accurate and reproducible.

All samples in a given case are initially analyzed by one method to determine the class of petroleum product. Samples can be excluded from further analysis based on results from the initial analysis. Further analyses are performed on samples which are potential matches to the source of the oil.

The Supervisor of Analysis interprets the data from all test methods performed and draws conclusions concerning whether or not certain spilled oil and suspected source samples were derived from the same chemical source. Data interpretation in oil spill source identification is non-trivial and fundamentally different from typical chemical analyses because the chemical properties of spilled oil are altered when oil is introduced into the environment. From the moment oil enters the environment, evaporation, dissolution, photochemical oxidation, biodegradation and other forces begin to alter the oil's characteristics or "fingerprint". These combined processes are termed weathering and can significantly complicate data interpretation. Contamination of the spilled oil with other oils or substances is another complicating factor. The experienced oil spill analyst is familiar with the complexities of the weathering processes and is able to distinguish real differences between two oils from those apparent differences resulting from weathering alterations. Interferences from contaminants can usually be recognized as such and discounted when weighing the test results. However, at times, severe weathering and/or contamination can mask many of the inherent differences between oils of a similar type.

REPORTING

The typical MSL/COIL OIS Report consists of four parts: case identifying information, a listing of analysis techniques performed, the results section and the conclusions section. The results section describes the types of petroleum observed in the samples provided, and comments on chemical similarities or dissimilarities between spill samples and/or between spill and suspected source samples. In all cases the Supervisor of Analysis bases the written results on interpretations from the aggregate of all data generated.

The conclusions section establishes whether or not a common source relationship exists between samples of spilled oil and samples of oil from a suspected source. There are two outcomes most frequently found in the conclusions section of the typical MSL/COIL OIS Report: "derived from a common source" and "not derived from a common source". However, to maintain the high degree of reliability for both "common source" and "not a common source" determinations, it is necessary to exclude some comparisons from these categories. Oil spill cases vary widely in possible explanations for why a determination could not be made. Instead of using only a statement of "inconclusive", the comments will ~~concisely~~ explain the reason for the outcome for each individual case. For example, some sources are highly inhomogeneous, and a sample of such a spill may not reflect the composition of the product remaining in such a source. The spill may contain very little oil, or it may be excessively weathered or contaminated. Of important note, MSL/COIL conclusions address chemical comparisons and not physical aspects of evidence. Additionally, chemical evidence provided in a MSL/COIL conclusion that is other than "common source" might still be used by the investigating officer, when combined with physical evidence to establish a preponderance of the evidence argument against an alleged responsible party.

ATTACHMENT UU-21

MSL/COIL OIS Reports are submitted to Marine Safety Offices (MSO's) for inclusion, as chemical evidence, in Marine Violation/Casualty Reports. The outcomes in the conclusions section of the OIS Report define the nature of the chemical evidence provided. MSO personnel are advised to combine the chemical evidence provided in the MSL/COIL OIS Reports with physical and circumstantial evidence developed during the investigation when writing Marine Violation Reports. Inquiries challenging the technical content of MSL/COIL OIS Reports by representatives of the alleged responsible party should be handled at the Hearing Officer level. Explicit guidance describing the communications process between the Hearing Officer and the MSL/COIL Supervisor of Analysis on technical issues involving chemical evidence is given in Commandant (G-LMI) memorandum 16460 dated 26 January 1981.

PERSONNEL QUALIFICATIONS

MSL/COIL laboratory technicians performing sample preparation and testing are graduates of the Coast Guard Marine Science Technician School. Each MSL/COIL technician has successfully completed a comprehensive training program at the MSL/COIL facility. Additionally, many have received supplemental training at leading civilian institutions in their specialty area.

The Supervisor of Analysis monitors all aspects of the analysis, certifies and interprets the test results, and prepares the final MSL/COIL report. This individual is a professionally trained chemist experienced in oil spill source identification. Individuals currently qualified to perform this function are:

Lieutenant Commander Kristy L. Plourde, U.S. Coast Guard
Commanding Officer
B.S. Physical Sciences, 1983, US Coast Guard Academy
M.S. Chemistry, 1989, University of Connecticut

Dr. Martha Hendrick
Chemist
B.A. Chemistry, 1969, Rhodes College
M.A. Education, 1974, Stanford University
Ph.D. Analytical Chemistry, 1985, University of Connecticut
Chair, ASTM Subcommittee D19.31, Waterborne Oils

REFERENCES

A more technical description of the OIS is contained in Report CG-D-52-77 "Oil Spill Identification System", Final Report, June 1977, USCG R&D Center. This document is available through the National Technical Information Service, Springfield, VA 22161.

For information concerning the ASTM standards used in Oil Spill Identification, consult "Oil in the Environment", Martha S. Hendrick, Ph.D., ASTM Standardization News, April 1991.

For additional information regarding the applicability of the Coast Guard's OIS, see "Chemical Identification of Oil Spill Sources", Allen P. Bentz, Ph.D., The Forum, Volume XIII, Number 2, Winter 1978. Dr. Bentz is a research scientist at the Coast Guard Research and Development Center and a recognized expert in the field of oil spill source identification. He has been closely involved with most of the development work leading to the present state-of-the-art.

ATTACHMENT UU-22

ATTACHMENT VV

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JSS1

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022796 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) SOIL Lab Sample ID: 292741

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

% Moisture: 0 decanted: (Y/N) N Date Received: 03/01/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/08/96

Concentrated Extract Volume: 10000(uL) Date Analyzed: 03/30/96

Injection Volume: 1.0(uL) Dilution Factor: 50.0

GPC Cleanup: (Y/N) Y pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2500	U
319-85-7	beta-BHC	2500	U
319-86-8	delta-BHC	2500	U
58-89-9	gamma-BHC (Lindane)	2500	U
76-44-8	Heptachlor	2500	U
309-00-2	Aldrin	2500	U
1024-57-3	Heptachlor epoxide	1400	J
959-98-8	Endosulfan I	2500	U
60-57-1	Dieldrin	5000	U
72-55-9	4,4'-DDE	4800	JP
72-20-8	Endrin	21000	P
33213-65-9	Endosulfan II	5000	U
72-54-8	4,4'-DDD	3400	JP
1031-07-8	Endosulfan sulfate	5000	U
50-29-3	4,4'-DDT	110000	EP
72-43-5	Methoxychlor	25000	U
53494-70-5	Endrin ketone	5000	U
7421-36-3	Endrin aldehyde	69000	P
5103-71-9	alpha-Chlordane	1600	JP
5103-74-2	gamma-Chlordane	2500	U
8001-35-2	Toxaphene	250000	U
12674-11-2	Aroclor-1016	50000	U
11104-28-2	Aroclor-1221	100000	U
1114-16-5	Aroclor-1232	50000	U
53469-21-9	Aroclor-1242	50000	U
12672-29-6	Aroclor-1248	50000	U
11097-69-1	Aroclor-1254	50000	U
11096-82-5	Aroclor-1260	1500000	E

ATTACHMENT VV-1

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JSS1DL

Lab Name: INCHCAPE ENVIRONMENTAL Contract: 95X22651

Lab Code: INCHVT Case No.: PA022795 SAS No.: SDG No.: BEC2D

Matrix: (soil/water) SOIL Lab Sample ID: 292741D1

Sample wt/vol: 1.0 (g/mL) G Lab File ID: _____

% Moisture: 0 decanted: (Y/N) N Date Received: 03/01/96

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 03/08/96

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 03/30/96

Injection Volume: 1.0 (uL) Dilution Factor: 500.0

GPC Cleanup: (Y/N) Y pH: 5.0 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	25000	U
319-85-7	beta-BHC	25000	U
319-86-8	delta-BHC	25000	U
58-89-9	gamma-BHC (Lindane)	25000	U
76-44-8	Heptachlor	25000	U
309-00-2	Aldrin	25000	U
1024-57-3	Heptachlor epoxide	25000	U
959-98-8	Endosulfan I	25000	U
60-57-1	Dieldrin	50000	U
72-55-9	4,4'-DDE	50000	U
72-20-8	Endrin	28000	DJP
33213-65-9	Endosulfan II	50000	U
72-54-8	4,4'-DDD	50000	U
1031-07-8	Endosulfan sulfate	50000	U
50-29-3	4,4'-DDT	50000	U
72-43-5	Methoxychlor	250000	U
53494-70-5	Endrin ketone	50000	U
7421-36-3	Endrin aldehyde	75000	DP
5103-71-9	alpha-Chlordane	25000	U
5103-74-2	gamma-Chlordane	25000	U
8001-35-2	Toxaphene	2500000	U
12674-11-2	Aroclor-1016	500000	U
11104-28-2	Aroclor-1221	1000000	U
1114-16-5	Aroclor-1232	500000	U
53469-21-9	Aroclor-1242	500000	U
12672-29-6	Aroclor-1248	500000	U
11097-69-1	Aroclor-1254	500000	U
11096-82-5	Aroclor-1260	2500000	D

ATTACHMENT VV-2

ATTACHMENT WW

NEW JERSEY DEPARTMENT OF HEALTH

Public Health & Environmental Laboratories
Environmental & Chemical Laboratory Services

Fax Routing Slip

To

Name of Recipient: Frank Sorce / John Usmiani	*Telephone:* 584-4280
Organization: NJDEP	*FAX Number:* 584-4298

From

Name of Sender: Joseph F. Wallin	*Telephone:* 609-292-7749
Organization: Environmental & Chemical Labs.	*FAX Number:* 609-984-0646

Date: 11/20/95

ATTACHMENT WW-1

Public Health and Environmental Labs
Environmental and Chemical Laboratory Services
CN 361
Trenton, NJ 08625-0361

REQUEST FOR ASBESTOS ANALYSIS

Lab Sample No. 960195
Sample Type: [ ]Bulk
[✓]Surface [ ]Air - PCM
[ ]Air - TEM (Non-AHERA)
Request Status
[X]Rush [ ]Routine

Case Number H-_____ Field No. Sample A Sampling Date 11/13/95
Sample Collector John Usmiani
Sample Time 1:00 pm Flow Rate _____ LPM Total Air Volume _____ L
Sample Site (Name of Facility) Paperboard
Sample Location (Complex, Building, Room, Etc.)
Bldg. Room Walls
Sample Description (Location of Sampler, Etc.)
Paperboard Sample A

Forward Results To
John Usmiani / Frank Soroe DEP
Building/Room No. Phone 584-4280

FOR LABORATORY USE ONLY

BULK ASBESTOS Date Rec'd 11-15-95 Asbestos Lab No. A8747

Type of Asbestos	Percent Asbestos		Analysis
[✓]Chrysotile	18%	[✓]Glass	[✓]Raw
[ ]Amosite		[✓]Cellulose	[ ]Cleaned
[ ]Crocidolite		[ ]Other	[✓]PLM
[ ]Other			[✓]X-Ray

Comments:

SURFACE ASBESTOS Date Rec'd _____ Asbestos Lab No. _____

Type of Asbestos	Percentage X-Ray	Fiber Bundles per % Wt.Basis
[ ]Chrysotile		
[ ]Amosite		
[ ]Other		

Non-Asbestos: Glass _____ Other _____

Comments:

AIR ASBESTOS Date Rec'd _____ Asbestos Lab No. _____

Type of Asbestos	TEM-Asbestos F/CC	Total ng/m^3	PCM
[ ]Chrysotile			Total F/CC
[ ]Amosite			
[ ]Other			All Fiber
Below Detection Level			≥ 5 um

Comments:

Analyst	Date	Laboratory Chief	Date
John L Brooks	11-17-95	John L Brooks	11-17-95

CHEM-15
AUG 93

Distribution: White, Canary and Pink-Submit with Sample
Gold - Originator

G3/63

ATTACHMENT WW-2

Public Health and Environmental Labs
Environmental and Chemical Laboratory Services
CN 361
Trenton, NJ 08625-0361

REQUEST FOR ASBESTOS ANALYSIS

Sample Type: [ ]Bulk [✓]Surface [ ]Air - PCM [ ]Air - TEM (Non-AHERA)
Request Status [X]Rush [ ]Routine

Case Number H-_____ Field No. Sample B Sampling Date _____
Sample Collector John Usman
Sample Time 1:30 Flow Rate _____ LPM Total Air Volume _____ L
Sample Site (Name of Facility) Paperboard
Sample Location (Complex, Building, Room, Etc.)
Bulk Piping
Sample Description (Location of Sampler, Etc.)
Paperboard Sample B

Forward Results To
John Usman / Frank Simon DEP
Building/Room No. Phone 841-4250

FOR LABORATORY USE ONLY

BULK ASBESTOS Date Rec'd 11-15-95 Asbestos Lab No. A8748

Type of Asbestos	Percent Asbestos		Analysis
[ ]Chrysotile		[ ]Glass	[✓]Raw
[✓]Amosite	14%	[ ]Cellulose	[✓]Cleaned
[ ]Crocidolite		[ ]Other	[✓]PLM
[ ]Other			[✓]X-Ray

Comments:

SURFACE ASBESTOS Date Rec'd _____ Asbestos Lab No. _____

Type of Asbestos	Percentage X-Ray	Fiber Bundles per % Wt.Basis
[ ]Chrysotile		
[ ]Amosite		
[ ]Other		

Non-Asbestos: Glass _____ Other _____

Comments:

AIR ASBESTOS Date Rec'd _____ Asbestos Lab No. _____

Type of Asbestos	TEM-Asbestos F/CC	Total ng/m^3	PCM
[ ]Chrysotile			Total F/CC
[ ]Amosite			
[ ]Other			All Fiber
Below Detection Level			≥ 5 um

Comments:

Analyst John J Brunk Date 11-17-95 Laboratory Chief John J Brunk Date 11-17-95

CHEM-15
AUG 93

Distribution: White, Canary and Pink-Submit with Sample
Gold - Originator

G3/63

ATTACHMENT WW-3

ATTACHMENT XX

Porcello Engineering, Inc.
60 Passaic Avenue, Fairfield, New Jersey 07004 Phone: (201) 882-8377 Fax: (201) 882-8476

March 28, 1996

County of Passaic
Administration Building
311 Pennsylvania Avenue
Paterson, New Jersey 07503-1718

Re: Asbestos Bulk Sample Analysis
E. 26th Street Bet. 2nd & 3rd Avenue

CERTIFICATE OF BULK SAMPLE ANALYSIS

Sample - #JSH 96-03-27-01 Grey Insulation	55.0% 45.0%	Amosite Non-Fibrous (CaCo)
Sample - JSH 96-03-27-01 Grey Insulation	60.0% 40.0%	Amosite Non-Fibrous (CaCo)

Last Item-

Report To: 3cp, 1file, 1bill

Post-it® Fax Note 7671 Date 3/29 # of pages ▶ 1
To S. HAAS From
Co./Dept. Passaic County Co.
Phone # Phone #
Fax # 225-0222 Fax #

ATTACHMENT XX-1

State of New Jersey
Department of Environmental Protection
Division of Publicly Funded Site Remediation
CN 413
Trenton, New Jersey 08625-0413
(609) 984-2580
Fax: (609) 633-2360

Christine Todd Whitman
Governor

Robert C. Shinn, Jr.
Commissioner

FAX TRANSMITTAL

DATE: MAY 13, 1997

TO: JOHN UJMIANI, EMSA

FAX NUMBER: 584-4298

NUMBER OF PAGES INCLUDING COVER SHEET: TWO (2)

FROM: S. VIJAYASUNDARAM, BSM

CONFIRMATION PHONE NUMBER: TWO (2)

NOTES:

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Recycled Paper

ATTACHMENT XX-2

ATTACHMENT YY

75FFS00002
80

NEW JERSEY DEPARTMENT OF HEALTH
PUBLIC HEALTH AND ENVIRONMENTAL LABORATORIES

PCB OIL RESULTS

FIELD NO: 11095-MW4 | LAB NO: 437

DATE OF ANALYSIS: 1/13/95 | INSTRUMENT ID NO: G62518

CAS #	COMPOUND	RESULTS PPM	DL PPM
12674-11-2	AROCLOR 1016	N.D.	50
11104-28-2	AROCLOR 1221	N.D.	50
11141-16-5	AROCLOR 1232	N.D.	50
53469-21-9	AROCLOR 1242	N.D.	50
12672-29-6	AROCLOR 1248	N.D.	50
11097-69-1	AROCLOR 1254	N.D.	50
11096-82-5	AROCLOR 1260	N.D.	50

COMMENTS:

Analyst Name (print)	Signature	Date
GEORGE A. CASEY	George Casey	1/17/95
Supervisor Name (print)	Signature	Date
JOSEPH B. WARGO	Joseph B Wargo	1/17/95

If no results appear in the results' column, please refer to the Detection Limits (DL).

Method: "The Analysis of Polychlorinated Biphenyls in Tranformer Fluid and Waste Oils", Environmental Mointoring and Support Lab, Office of Research and Development, U.S. E.P.A., Cincinnati, Ohio, 45268 June 24, 1980

REPORT SUBMITTED
JAN 30 1995
NJDOH ENVIRONMENTAL CHEMISTRY LABORATORY

ATTACHMENT YY-1

95PFS00002
79

NEW JERSEY DEPARTMENT OF HEALTH
PUBLIC HEALTH AND ENVIRONMENTAL LABORATORIES

PCB OIL RESULTS

FIELD NO: 11095 -4STB | LAB NO: 438

DATE OF ANALYSIS: 1/13/95 | INSTRUMENT ID NO: G62518

CAS #	COMPOUND	RESULTS PPM	DL PPM
12674-11-2	AROCLOR 1016	N.D.	50
11104-28-2	AROCLOR 1221	N.D.	50
11141-16-5	AROCLOR 1232	N.D.	50
53469-21-9	AROCLOR 1242	N.D.	50
12672-29-6	AROCLOR 1248	N.D.	50
11097-69-1	AROCLOR 1254	N.D.	50
11096-82-5	AROCLOR 1260	538	50

COMMENTS:

Analyst Name (print)	Signature	Date
GEORGE A. CASEY	George A. Casey	1/17/95
Supervisor Name (print)	Signature	Date
JOSEPH B. WARGO	Joseph Wargo	1/17/95

If no results appear in the results' column, please refer to the Detection Limits (DL).

Method: "The Analysis of Polychlorinated Biphenyls in Tranformer Fluid and Waste Oils", Environmental Mointoring and Support Lab, Office of Research and Development, U.S. E.P.A., Cincinnati, Ohio, 45268 June 24, 1980

REPORT SUBMITTED
JAN 30 1995
NJDOH ENVIRONMENTAL CHEMISTRY LABORATORY

ATTACHMENT YY-2

95PFS0002
79
80

NEW JERSEY DEPARTMENT OF HEALTH
PUBLIC HEALTH AND ENVIRONMENTAL LABORATORIES

PCB OIL CONTROL RESULTS

CONTROL ID : SPK oil EPA 57.7 | LAB DATE: 1/12/95

DATE OF ANALYSIS: 1/13/95 | INSTRUMENT ID NO: GC-818

For Samples (LAB#S) 137,437

CAS #	COMPOUND	(CONC.) PPM	Results PPM	% RECOVERY
53469-21-9	AROCLOR 1242	(57.7)	47.9	83%

COMMENTS:

Analyst Name (print)	Signature	Date
GEORGE A. CASEY	George A Casey	1/17/95
Supervisor Name (print)	Signature	Date
JOSEPH B. WARGO	Joseph Wargo	1/17/95

Method: "The Analysis of Polychlorinated Biphenyls in Tranformer Fluid and Waste Oils", Environmental Mointoring and Support Lab, Office of Research and Development, U.S. E.P.A., Cincinnati, Ohio, 45268 June 24, 1980

REPORT SUBMITTED

JAN 30 1995

NJDOH ENVIRONMENTAL CHEMISTRY LABORATORY

ATTACHMENT YY-3

95PFS00002

79
80

NEW JERSEY DEPARTMENT OF HEALTH
PUBLIC HEALTH AND ENVIRONMENTAL LABORATORIES

PCB OIL BLANK RESULTS

FIELD NO: _____ | LAB NO: BLK 1/12

DATE OF ANALYSIS: 1/13/95 | INSTRUMENT ID NO: G 62518

For Samples 437, 438 --

CAS #	COMPOUND	RESULTS PPM	DL PPM
12674-11-2	AROCLOR 1016	N.D.	50
11104-28-2	AROCLOR 1221	N.D.	50
11141-16-5	AROCLOR 1232	N.D.	50
53469-21-9	AROCLOR 1242	N.D.	50
12672-29-6	AROCLOR 1248	N.D.	50
11097-69-1	AROCLOR 1254	N.D.	50
11096-82-5	AROCLOR 1260	N.D.	50

COMMENTS:

Analyst Name (print)	Signature	Date
GEORGE A. CASEY	George Casey	1/12/95
Supervisor Name (print)	**Signature**	**Date**
JOSEPH B. WARGO	Joseph Wargo	1/12/95

If no results appear in the results' column, please refer to the Detection Limits (DL).

Method: "The Analysis of Polychlorinated Biphenyls in Tranformer Fluid and Waste Oils", Environmental Mointoring and Support Lab, Office of Research and Development, U.S. E.P.A., Cincinnati, Ohio, 45268 June 24, 1980

REPORT SUBMITTED

JAN 30 1995

NJDOH ENVIRONMENTAL CHEMISTRY LABORATORY

ATTACHMENT YY-4

ATTACHMENT ZZ

State of New Jersey
Department of Environmental Protection and Energy

Robert C. Shinn, Jr.
Commissioner

APR 06 1994

M E M O R A N D U M

TO: Trish Conti
Bureau of Environmental Evaluation & Risk Assessment

THROUGH: Greg Toffoli
Carol Pillsbury
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

FROM: Robert P. Posey RPP 4/6/94
Quality Assurance Section
Bureau of Environmental Measurements and Quality Assurance

SUBJECT: Analytical Data Review for **Paperboard Specialties**. Sampling event conducted on November 9 and 10, 1993. Analyses performed by NJDEPE-BOAS and NJDEPE-BRIAS.

Samples Reviewed

Field Sample #:	Lab Sample #:	Analyses:
PS110993FB	24336	VOA
PSUP110993 10-12	24337	VOA, BNA, Pest/PCB, Metals
PSDG110993 6-8	24338	VOA, BNA, Pest/PCB, Metals
PS11093 PA-7	24339	VOA, BNA, Pest/PCB, Metals

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has performed a quality assurance review of analytical data for the samples listed above according to regulatory deliverable requirements. Specific comments for each fraction are provided below. Please see the Target Compound Summary List for additional information.

General Requirements

The laboratory data deliverables deficiencies are too numerous to count. Many of these have been detailed in the comments specific to each analytical fraction. The overall conclusion is that NJDEPE-BOAS/BRIAS has not produced a data package which meets the requirements of N.J.A.C. 7:26E - The Technical Requirements for Site Remediation. Deficiencies applicable to all fractions include: evidence of mixing of methods, unacceptable method summaries, failure to properly report MDLs or PQLs, poor binding.

VOA Fraction

1. The case team agreed to the use of USEPA Method 624 for the analysis of the soil samples. This should not have been permitted, but, since it was agreed to by DPFSR, the reviewer has not rejected the data.

2. The laboratory did not analyze for Acetone and Xylenes since they are not Method 624 analytes. Please note that Xylenes may be present in sample PSDG110993 6-8 based on the presence of peaks between 28-31 minutes in this sample's chromatogram; however, the laboratory failed to perform a library search which may have identified Xylenes. The package includes the notation that a strong fuel oil odor was detected for sample PSDG110993 6-8 and that non-specific petroleum hydrocarbons were found.

3. The laboratory reported Methylene chloride as not detected (ND) in sample PS11093 PA-7. The quantitation report has a notation indicating the analyst's decision that "MeCl2 false positive due to solvent extractions in lab." The positive result for Methylene chloride should have been reported anyway, but could have been listed with a footnote.

BNA Fraction

1. The results for all samples are rejected because the associated method blank is rejected. The laboratory indicated that only a paper thimble with a theoretical weight of 10.0 grams was used as the method blank. The method blank should have consisted of 30g of anhydrous sodium sulfate carried through the same steps as the field samples.

2. The data package includes numerous unacceptable references to USEPA Method 625. The method summary indicates Method 625 was used. However, the chain of custody form indicates that Method 8270 was requested. The initial calibration summary form lists Method 8270 as being performed, but the quantitation reports for the standards list Method 625. The sample quantitation reports reference the use of Method 625, as does the quantitation report for the method blank.

3. The sample results were reported in units of ug/g instead of ug/Kg. In addition, MDLs/PQLs were reported in units of ug/L rather than ug/Kg.

4. The laboratory did not perform a library search for non-targeted compounds.

5. The chromatogram for sample PSDG110993 6-8 includes an "envelope" pattern indicating the presence of petroleum hydrocarbons.

ATTACHMENT 22-2

Pesticide/PCB Fraction

1. The results for all samples are rejected because the laboratory performed only a single point initial calibration. USEPA SW846, 3rd. edition Method 8080 requires that a five point initial calibration be performed. Retention time windows for the single component pesticides were not determined because of the single point calibration.

2. The method referenced for the analysis was USEPA Method 608 which is unacceptable for the analysis of soil samples. Method 608 MDLs were reported.

3. A comparison of the chromatograms for the PCB standards and the samples indicates that PCBs are probably not present in the samples.

4. The laboratory did not report any results for Methoxychlor although Methoxychlor was present in the pesticide standard mix which was analyzed.

5. The laboratory did not analyze a Toxaphene standard nor report any results for this multi-component pesticide.

6. The laboratory did not report the recovery of the surrogate compound DBC.

7. Data for a matrix spike/matrix spike duplicate analysis was not submitted.

8. The result sheets contain a typographical error. The results are reported as "Ig/g." This should read "ug/g." However, the results should have been reported as "ug/Kg."

Inorganics

1. The data package did not contain any of the required forms for initial calibration, continuing calibration, initial calibration blank, continuing calibration blank, serial dilution and laboratory control standards. This QA/QC information was reviewed using the individual analyte notebook sheets which were submitted.

2. The laboratory did not utilize ICP for any of the analytes. Flame AA was used for all analytes, except for Mercury (CVAA) and Arsenic, Antimony, Selenium and Thallium (GFAA). Cyanide, part of the TAL, was not analyzed.

3. Certain analytes were qualified because they were outside quality control limits for the following analyses: Duplicate.

Please contact this office at 3-0752 if you have any questions.

ATTACHMENT 22-3

Attachments

c. William Lowry, BEMQA
S. Vijaysundaram, BSM

ATTACHMENT ZZ-4

Target and Non-Target Compound Summary

Site Name: **Paperboard Specialties.** Sampling event conducted November 9 and 10, 1993.

Sample	Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes

PS110993FB

VOA Fraction: (ug/L)

No compounds detected.

PSUP110993 10-12

VOA Fraction: (ug/Kg)

No compounds detected. All non-detected results are qualified because an inappropriate method [i.e. USEPA Method 624 (a water method)] was used for the analysis of this soil sample.

BNA Fraction: (ug/Kg)

Rejected because an unacceptable method blank was used.

Pesticide/PCB Fraction: (ug/Kg)

The non-detected results for all single component pesticides are rejected because the use of a single point calibration prevents the determination of retention time windows. Comparison of the chromatograms for the PCB standards to the sample chromatogram suggests that PCBs are not present in this sample.

Metals: (mg/Kg)

Aluminum	U	6740	6740		
Arsenic	U	1.65	1.65		
Barium	U	26.5	26.5		
Beryllium	U	0.6	0.6		
Calcium	U	61.8	61.8		
Chromium	U	20.6	20.6		
Cobalt	U	10.6	10.6		
Copper	U	25.3	25.3		
Iron	U	17500	17500		
Lead	U	44.7	44.7		
Magnesium	U	1760	1760		
Manganese	U	400	400		
Nickel	U	21.8	21.8J	qualify	3
Potassium	U	588	588		
Silver	U	0.6	0.6		
Sodium	U	176	176		
Vanadium	U	25.3	25.3		
Zinc	U	31.8	31.8		

PSDG110993 6-8

VOA Fraction: (ug/Kg)

No compounds detected. All non-detected results are qualified because an inappropriate method [i.e. USEPA Method 624 (a water method)] was used for the analysis of this soil sample.

BNA Fraction: (ug/Kg)

Rejected because an unacceptable method blank was used.

ATTACHMENT ZZ-5

Sample	Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes

Pesticide/PCB Fraction: (ug/Kg)
The non-detected results for all single component pesticides are rejected because the use of a single point calibration prevents the determination of retention time windows. Comparison of the chromatograms for the PCB standards to the sample chromatogram suggests that PCBs are not present in this sample.

Metals: (mg/Kg)

Aluminum	U	8110	8110		
Arsenic	U	2.05	2.05		
Barium	U	82.8	82.8		
Beryllium	U	0.6	0.6		
Cadmium	U	0.6	0.6		
Calcium	U	103	103		
Chromium	U	20.2	20.2		
Cobalt	U	9.2	9.2		
Copper	U	21.5	21.5		
Iron	U	18100	18100		
Lead	U	142	142		
Magnesium	U	1530	1530		
Manganese	U	491	491		
Nickel	U	14.1	14.1J	qualify	3
Potassium	U	399	399		
Silver	U	0.6	0.6		
Sodium	U	153	153		
Vanadium	U	28.2	28.2		
Zinc	U	307	307		

PS111093 PA-7

VOA Fraction: (ug/Kg)
All non-detected results are qualified because an inappropriate method [i.e. USEPA Method 624 (a water method)] was used for the analysis of this soil sample.

Methylene chloride	241U	ND	6.3J	qualify	1, 2

BNA Fraction: (ug/Kg)
Rejected because an unacceptable method blank was used.

Pesticide/PCB Fraction: (ug/Kg)
The non-detected results for all single component pesticides are rejected because the use of a single point calibration prevents the determination of retention time windows. Comparison of the chromatograms for the PCB standards to the sample chromatogram suggests that PCBs are not present in this sample.

Metals: (mg/Kg)

Aluminum	U	4190	4190
Arsenic	U	1.29	1.29
Barium	U	41.7	41.7
Beryllium	U	0.6	0.6
Calcium	U	85.7	85.7
Chromium	U	11.4	11.4
Cobalt	U	6.9	6.9
Copper	U	4.6	4.6
Iron	U	13100	13100
Lead	U	20.0	20.0
Magnesium	U	1070	1070
Manganese	U	560	560

Sample	Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
	Nickel	U	6.3	6.3J	qualify	3
	Potassium	U	457	457		
	Silver	U	0.6	0.6		
	Sodium	U	68.6	68.6		
	Vanadium	U	16.0	16.0		
	Zinc	U	31.4	31.4		

Footnotes:

1. The QAS result is quantitatively qualified because it is below the PQL.
2. The laboratory did not report the presence of this analyte because the analyst decided it was a false positive based on solvent extractions going on in laboratory at same time as VOA analysis.
3. The metal result is qualified because the relative percent difference (RPD) for the duplicate analysis was greater than 20%.

State of New Jersey
Department of Environmental Protection and Energy

Robert C. Shinn, Jr.
Commissioner

APR 20 1994

M E M O R A N D U M

TO: Trish Conti, Technical Coordinator
Bureau of Environmental Evaluation and Risk Assessment

THROUGH: Greg Toffoli, Section Chief
Carol Pillsbury
Quality Assurance Section
Bureau of Environmental Measurements & Quality Assurance

FROM: Karanvir S. Kaushal, Research Scientist KVK 4-19-94
Quality Assurance Section
Bureau of Environmental Measurements & Quality Assurance

SUBJECT: Data Validation of the Analytical Package for **Paperboard Specialties Inc,** Submitted by NJDEPE Laboratory.

The following samples were reviewed for the listed parameters.

Field ID	Lab ID	Sample Date	Parameter	Matrix
PB10193S5C	24088	10-01-93	VO,SV	Non-Aqueous
PBTRB4D	24189	09-28-93	VO,SV	Non-Aqueous
PBUST3	24090	09-29-93	VO	Aqueous
S11A	24102	10-05-93	VO,SV	Non-Aqueous
PA5B	24103	10-04-93	VO,SV	Non-Aqueous
S12C	24104	10-05-93	VO,SV	Non-Aqueous
S7A	24115	10-04-93	VO,SV	Non-Aqueous

The Quality Assurance Section, Bureau of Environmental Measurements and Quality Assurance, Division of Publicly Funded Site Remediation has reviewed the following samples according to USEPA Method 624 and Method 625 criteria for the listed parameters. The quality assurance review of the data is summarized below. A detailed evaluation is available for your review.

The analytical data reported in this package are acceptable except for the following qualifications and/or rejections resulting from the noted QA/QC deficiencies. The laboratory-reported non-detected results, found to be acceptable as a result of QA evaluation, are not listed on the Target and Non-target Analyte Summary List.

ATTACHMENT ZZ-8

Volatiles:

The samples were analyzed for volatile organics according to USEPA Method 624. Please note that 2-chloroethyl vinyl ether is neither analyzed nor reported for these samples.

The instrument ID numbers are not provided on the sample summary results or any raw data in the package. The data is acceptable on the assumption that the calibration and the sample analysis data are generated by the same instrument.

The laboratory detected methylene chloride in all samples. However, its presence was reported as non-detected (ND) on the volatile sample analysis summary sheet by the laboratory. The analyst attributed its presence to the contaminated laboratory air and labeled it as "false positive". Please be advised that methylene chloride above the laboratory detection limits was detected which would not have been negated by QAS due to the method blank contamination.

Many non-target petroleum hydrocarbons have been detected in sample 24103. Please note that library searches for non-target compounds are not included in the data package. Therefore, quantitative results for non-targets are not available in the package.

Semivolatiles:

The samples were analyzed for semivolatiles according USEPA Method 625 and prepared according to SW-846 Method 3540.

The chain of custody for sample 24090 was marked for the analysis for semivolatiles. The semivolatiles data for this sample was not submitted in the data package. Please note that only 40 mls of the sample was provided which would be insufficient to do semivolatile analysis, thus explaining its absence in the data package.

The laboratory extracted all samples past the holding time. As a result of the holding time deficiency samples 24088 and 24089 are rejected and samples 24102, 24103, 24104 and 24115 are qualified. A buffer period of 10 days was allowed and used to qualify samples. The results of these samples may be biased low.

The surrogates and the internal standards used by the laboratory were in accordance with the method requirements and acceptable. The % recovery for decafluorobiphenyl (perfluorobiphenyl) was 87% in sample 24104. This recovery was outside the laboratory established range of 20-85%. The effect of this deficiency on the data quality would be minimal.

Many non-target compounds are present in samples reviewed. Please note that library searches for non-targeted compounds are not included in the data package. Therefore, quantitative results for non-target compounds are not available in the package.

ATTACHMENT ZZ-9

GC Fingerprint Comparison:

A GC fingerprint comparison of the environmental samples with suspected source samples was performed by the laboratory. The reviewed samples were compared with LC # 23629 and LC # 23630. The conclusions of these comparisons are acceptable.

Should you have any questions regarding this review, please contact this office at 3-0752.

c: William Lowry, BEMQA
S. Vijayasundaram, BSM

ATTACHMENT ZZ-10

Target and Non-target Analyte List

Site Name: **Paperboard Specialities**

Note: Only positive results or those that require QAS action are provided below. Please refer to the analytical data for additional information.

Sample	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
24088: (% Solid - 91)					
Volatiles (ug/Kg):					
methylene chloride	600	U	4000JB	qualify	4,5
Semivolatiles (ug/Kg): **(1:2 dilution)**					
fluorene	U	200J	200J	qualify	1
phenanthrene	U	700J	700J	qualify	1
di-n-butylphthalate	1200	1400	1400JB	negate	2
pyrene	U	200J	200J	qualify	1
bis(2-ethyl hexyl)-phthalate	300J	600J	600JB	negate	2
24089: (% Solid - 87)					
Volatiles (ug/Kg):					
carbon-tetrachloride	U	170	170		
toluene	U	240	240		
methylene chloride	600	U	3400JB	qualify	4,5
Unknown/TIC:	Many detected. No library searches provided.				
Semivolatiles (ug/Kg): **(1:10 dilution)**					
acenaphthene	U	400J	400J	qualify	1
fluorene	U	1300J	1300J	qualify	1
phenanthrene	U	3200J	3200J	qualify	1
di-n-butylphthalate	1200	2000	2000JB	negate	2
pyrene	U	1400J	1400J	qualify	1
bis(2-ethyl hexyl)-phthalate	300J	700J	700JB	negate	2
24090:					
Volatiles (ug/L): **(1:5 dilution)**					
methylene chloride	0.97	U	4 .5J	negate	2
24102: (% Solid - 90)					
Volatiles (ug/Kg):					
methylene chloride	U	U	3400	disagree	4

ATTACHMENT 22-1(

Sample	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes
Semivolatiles (ug/Kg): **(1:2 dilution)**					
di-n-butylphthalate	1200	1300	1300JB	negate	2
bis(2-ethyl hexyl)-phthalate	300J	700J	700JB	negate	2
24103: (% Solid - 87)					
Volatiles (ug/L): **(1:2 dilution)**					
methylene chloride	U	U	5100	disagree	4
Unknown/TIC:	Many detected. No library searches provided.				
Semivolatiles (ug/Kg): **(1:2 dilution)**					
acenaphthene	U	1000J	1000J	qualify	1
fluorene	U	2500	2500		
phenanthrene	U	4400J	4400		
anthracene	U	500J	500J	qualify	1
di-n-butylphthalate	1200	1400	1400JB	negate	2
fluoranthene	U	300J	300J	qualify	1
pyrene	U	500J	500J	qualify	1
bis(2-ethyl hexyl)-phthalate	300J	900J	900JB	negate	2
24104: (% Solid - 84)					
Volatiles (ug/Kg):					
methylene chloride	U	U	3700	disagree	4
Semivolatiles (ug/Kg): **(1:2 dilution)**					
di-n-butylphthalate	1200	1700	1700JB	negate	2
bis(2-ethyl hexyl)-phthalate	300J	800J	800JB	negate	2
24115: (% Solid - 89)					
Volatiles (ug/Kg):					
methylene chloride	U	U	3700	disagree	4
Semivolatiles (ug/Kg): **(1:2 dilution)**					
di-n-butylphthalate	1200	1200	1200JB	negate	2
bis(2-ethyl hexyl)-phthalate	300J	1000J	1000JB	negate	3

ATTACHMENT 22-12

Target and Non-target Analyte List
(Paperboard Specialties)

FOOTNOTES:

1. The reported concentration is quantitatively qualified because the concentration is below the method detection (MDL) limit but greater than the instrument detection limit.

2. The value reported is less than 3x the value in the method blank. It is the policy of NJDEPE-DPFSR to negate the reported value due to probable foreign contamination unrelated to the actual sample. The end-user, however, is alerted that a reportable quantity of analyte/compound was detected.

3. This sample had moisture contents prior to analysis. The value reported prior to moisture correction was less than 3x the value in the method blank. It is the policy of NJDEPE-DPFSR to negate the reported value due to probable foreign contamination unrelated to the actual sample. The end-user, however, is alerted that a reportable quantity of analyte/compound was detected.

4. Please refer to the memo for details.

5. This sample had moisture and/or was diluted prior to analysis. The value reported prior to moisture/dilution correction was greater than three (3) times the value in the method/preparation blank and is considered "real". However, the reported value must be quantitatively qualified "J" due to the method blank contamination. The "B" qualifier alerts the end-user to the presence of this analyte in the method blank.

ATTACHMENT 22-13

Sample	Analyte	Method Blank Conc.	Lab Report Conc.	QAS Report Conc.	QAS Decision	Footnotes

TCLP-BNA Fraction: (ug/L)
Rejected because the holding time to TCLP extraction was exceeded.

Pesticides Fraction: (ug/L)
Rejected because the holding time to TCLP extraction was exceeded.

Metals: (mg/L)
There were no analytes with concentrations above the regulatory limits.

PS9793BEC2D
TCLP-VOA Fraction: (ug/L)
Rejected because the holding time to TCLP extraction was exceeded.

TCLP-BNA Fraction: (ug/L)
Rejected because the holding time to TCLP extraction was exceeded.

Pesticides Fraction: (ug/L)
Rejected because the holding time to TCLP extraction was exceeded.

Metals: (mg/L)
There were no analytes with concentrations above the regulatory limits.

Footnotes:

1. The result is qualified because the holding time to extraction was exceeded, but was within the QAS allowed buffer period.

2. Due to a transcription error, the laboratory reported the retention time of the analyte as the sample concentration.

3. The peak matched the Heptachlor retention time on both columns; however, due to the presence of PCBs in this sample, it is possible that the compound giving rise to this peak is actually a PCB congener.