40224

PELA

93

TECHNICAL MEMORANDUM NO. 3A
FOR
REMEDIAL INVESTIGATION/FEASIBILITY STUDY
CITY DISPOSAL CORPORATION LANDFILL
(DUNN LANDFILL)

(PELA Reference No. 495207)

Appendix G

Results of Analyses
Soil and Ground-Water Samples

Volume 14 of 16

Technical Report

SAMPLES: CA4749-CA4750, CA4720-CA4721

April 1991

P.E.LaMoreaux & Associates

OHM Corporation

ETC Environmental Testing and Certification Corp.

Technical Report

for

WASTE MANAGEMENT, INC.

Chain of Custody Data Required for ETC Data Management Summary Reports						
CA4749-CA4750	WASTE MANAGEMENT, INC		405			
ETC Sample No.	Company	Facility	Sample Point	Date	Time	Elapsed Hours

Richard P. Albert

Vice President, General Manager

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284 Raritan Center Parkway ■ CN 7808 ■ Edison, New Jersey 08818-7808 ■ 201-225-5600

ETC

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Standard Data	NA
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CASE NARRATIVE

ETC

SDG NARRATIVE

This technical report submitted by ETC Corporation contains the analytical results and required deliverables for WASTE MANAGEMENT, INC. Site 405 samples as identified below:

ETC ID	CLIENT ID	ETC ID	CLIENT ID
CA4749	SLPZ17B	CA4750	SLPZ17B

During the preparation and analysis of these samples, the following was observed:

VOLATILES:
(QV70377):

Problems were not observed during the analysis of these samples.

Release of the data contained in this hardcopy data package has been authorized by the following signature.

Gregory G. Morrison
Laboratory Manager

12/03/90
Date

File # 000324

METHODOLOGY

INTRODUCTION

Environmental Testing and Certification Corp.
284 Raritan Center Parkway, CN 7808
Edison, New Jersey 08818-7808
(201) 225-6700

This report contains analytical results in tabular form for your sample. It includes comprehensive data for each analytical process. Associated quality control data is also presented, including QC batch results for the laboratory blank, spiked blank, matrix spike and a replicated sample spike, as well as results from surrogate compound analyses. Quality control data for instrument performance is also included. Other appendices may include data system printouts and chain of custody records.

Analytical Methodology

ETC utilizes a wide variety of methodologies and EPA approved procedures which are listed below. Analytical results and Quality Assurance protocols are based upon the approriate guideline dependent upon the level of deliverable requested.

- "Methods of Organic Chemical Analysis of Municipal and Industrial Wastewater", Federal Register Vol. 49, No. 209, October 26, 1984;
- "Test Methods for Evaluating Solid Waste", SW-846 Third Edition, September 1986, USEPA;
- "Standard Methods for the Examination of Water and Wastewater" 1985, 14th, 15th and 16th Edition;
- "Methods for Chemical Analysis of Water and Wastes" March 1983, EMSL, EPA 600 4-79-020;
- Organic Analysis: Multi-media, Multi-Concentration-IFB-CLP, SOW February 1988;
- Inorganic Analysis: Multi-media, Multi-Concentration IFB-CLP, SOW July 1987;
- Dioxin Analysis: Soil/Sediment/Water Matrix; Multi-Concentration, Selected Ion Monitoring with Jar Extraction Procedure; IFB WA86-K357.
- "Methods for the Determination of Organic Compounds in Drinking Water" December 1988, EPA-600/4-88/039;
- "Handbook for Analytical Quality Control in Water and Wastewater Laboratories", EPA-600/4-79-019, March 1979;
- "National Enforcement Investigation Center Policies and Procedures Manual,EPA-330/9/78/001-R, Revised May 1986.

ETC

ETC Network Laboratories are certified to perform analytical analyses upon samples collected throughout the United States. It may be required that this environmental data be reported with reference to a certified laboratory. The Laboratory Identification Numbers for ETC Corp., Edison NJ Laboratory are summarized below for your information and reference. Please contact your Program Manager should you require certification verification for an ETC Network Laboratory.

Certification Summary, January 1990

State Agency	Certification Number
Alabama Department of Environmental Management	40280
Arizona Department of Environmental Quality	322
California Department of Health Services	162
Connecticut Department of Health Services	0511
Florida Department of Health and Rehabilitative Services	E87074 & 87262
Illinois Environmental Protection Agency	100224
Kansas Department of Health and Environment	E-148 & E1122
New Hampshire Department of Environmental Services	198948-B
New Jersey Department of Environmental Protection	12257
New York Department of Public Health	10586
Oklahoma Water Resources Board	8703
Pennsylvania Department of Environmental Regulation	68-323
South Carolina Department of Health and Environmental Control	94002
Tennessee Department of Health and Environmental Laboratory Services	02915
Utah Department of Health	E-91
Virginia Department of General Services	00113
Wisconsin Department of Natural Resources	999464070

VOLATILE DATA

QC SUMMARY

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ETCNJ | Laboratory Contract:

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

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	VBLK01	103	99	103		0
02	A4750MS	100	102	103		0
03	A4750MSD	101	103	110		0
04	A4750	102	105	101		0
05	A4749	103	109	114		0
06	A4976	102	110	108		0
07	A4976MS	102	109	103		0
08	A4976MSD	103	109	111		0
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETCNJ | Laboratory Contract:

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

Matrix Spike - EPA Sample No.: A4750 Level: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	53.763	0.000	51.811	96	59-172
Trichloroethene	53.763	0.000	49.119	91	62-137
Benzene	53.763	0.000	51.805	96	66-142
Toluene	53.763	0.000	49.618	92	59-139
Chlorobenzene	53.763	0.000	50.626	94	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	53.763	51.421	96	1	22	59-172
Trichloroethene	53.763	50.053	93	2	24	62-137
Benzene	53.763	52.424	98	1	21	66-142
Toluene	53.763	50.300	94	1	21	59-139
Chlorobenzene	53.763	51.429	96	2	21	60-133

Column to be used to flag recovery and RPD values with an asterisk

Values outside of limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

_____

FORM III VOA -2 1/87 Rev.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID: >D1693 Lab Sample ID: VBLK01

Date Analyzed 10/24/90 Time Analyzed: 1336

Matrix: (soil/water) SOIL Level: (low/med) LOW

Instrument ID: GC/MS D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A4750MS	CA4750VS	>D1694	1447
02	A4750MSD	CA4750VR	>D1695	1531
03	A4750	CA4750V	>D1696	1616
04	A4749	CA4749V	>D1698	1808
05	A4976	CA4976V	>D1699	1854
06	A4976MS	CA4976VS	>D1700	1939
07	A4976MSD	CA4976VR	>D1701	2024
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

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

Lab File ID: >D1669 BFB Injection Date: 10/23/90

Instrument ID: GC/MS_D___ BFB Injection Time: 1028

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.2
75	30.0 - 60.0% of mass 95	50.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	87.0
175	5.0 - 9.0% of mass 174	7.2 (8.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	86.1 (98.9)1
177	5.0 - 9.0% of mass 176	7.2 (8.4)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC703760S	>D1670	10/23/90	1114
02	_____	QC703760S	>D1671	10/23/90	1200
03	_____	QC703760S	>D1672	10/23/90	1244
04	_____	QC703760S	>D1673	10/23/90	1329
05	_____	QC703760S	>D1674	10/23/90	1411
06	_____	QC703760	>D1675	10/23/90	1456
07	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETCNJ | Laboratory | Contract:

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

Lab File ID: >D1690 | BFB Injection Date: 10/24/90

Instrument ID: GC/MS D | BFB Injection Time: 1140

Matrix: (soil/water) SOIL | Level: (low/med) LOW | Column: (pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	56.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.6
175	5.0 - 9.0% of mass 174	7.1 (8.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	88.4 (99.8)1
177	5.0 - 9.0% of mass 176	7.6 (8.6)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	QC70377VS	>D1691	10/24/90	1207
02	VBLK01	QC70377V	>D1693	10/24/90	1336
03	A4750MS	CA4750VS	>D1694	10/24/90	1447
04	A4750MSD	CA4750VR	>D1695	10/24/90	1531
05	A4750	CA4750V	>D1696	10/24/90	1616
06	A4749	CA4749V	>D1698	10/24/90	1808
07	A4976	CA4976V	>D1699	10/24/90	1854
08	A4976MS	CA4976VS	>D1700	10/24/90	1939
09	A4976MSD	CA4976VR	>D1701	10/24/90	2024
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SAMPLE DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
A4749

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4749U

Sample wt/vol: ~~4.6~~ 5.0 (g/mL) G Lab File ID: >D1698

Level: (low/med) LOW Date Received: 10/17/90

% Moisture: not dec. 88 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4749

Lab Name: ETCN Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4749

Sample wt/vol: 5 (g/mL) G Lab File ID: >D1698

Level: (low/med) LOW Date Received: 10/17/90

% Moisture: not dec. 8 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
	Tetrahydrofuran	11	U

FORM I VOA 1/87 Rev.

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A4749

Lab Name: ETCNJ | Laboratory | Contract:

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

Matrix: (soil/water) SOIL | Lab Sample ID: CA4749U

Sample wt/vol: 5.0 (g/mL) G | Lab File ID: >D1698

Level: (low/med) LOW | Date Received: 10/17/90

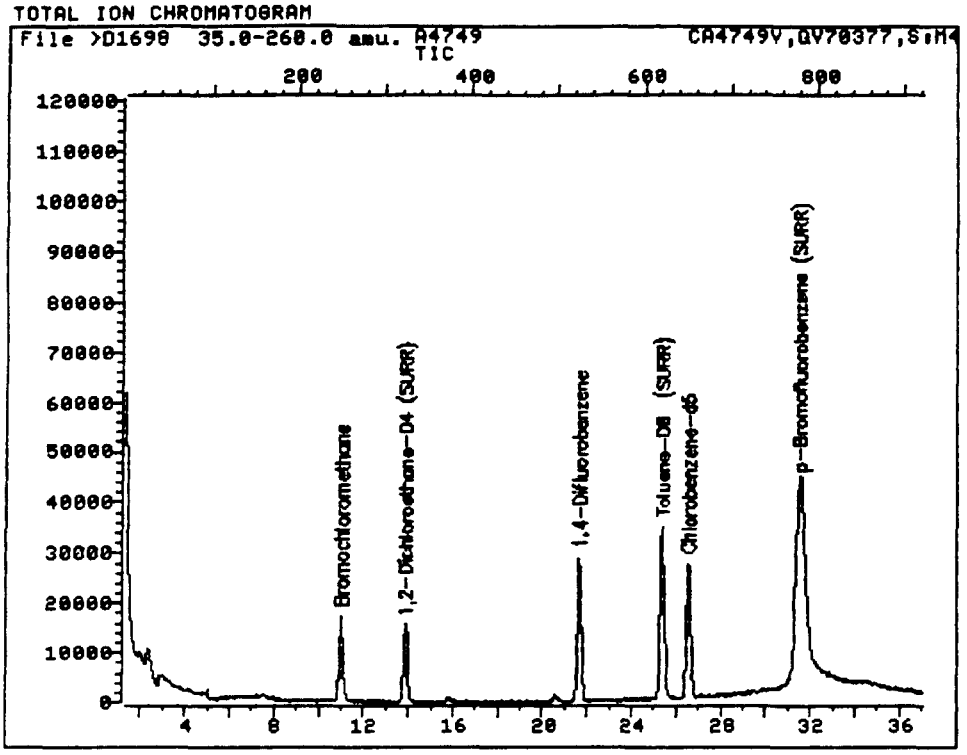
% Moisture: not dec. 8 | Date Analyzed: 10/24/90

Column: (pack/cap) PACK | Dilution Factor: 1.0

Number TICs found: 0 | CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >D1698::U0 Quant Output File: ^D1698::AQ
Name: A4749
Misc: CA4749V,QV70377,S:M4,5,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

Operator ID: EK1710
Quant Time: 901024 18:46
Injected at: 901024 18:08

QUANT REPORT Page 1

Operator ID: EK1710 Quant Rev: 7 Quant Time: 901024 18:46
Output File: ^D1698::AQ Injected at: 901024 18:08
Data File: >D1698::U0 Dilution Factor: 1.00000
Name: A4749
Misc: CA4749U,QU70377,S:M4,5,,

ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.00	250	30659	250.00	NG	96
18)	1,2-Dichloroethane-D4 (SURR)	13.87	324	90696	285.91	NG	98
20)	*1,4-Difluorobenzene	21.66	525	120136	250.00	NG	95
36)	*Chlorobenzene-d5	26.55	651	93702	250.00	NG	72
41)	Toluene-D8 (SURR)	25.38	621	140148	256.46	NG	93
45)	p-Bromofluorobenzene (SURR)	31.52	779	110430	272.05	NG	87

* Compound is ISTD

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4750

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750V

Sample wt/vol: ~~4.6~~ 5 (g/mL) G Lab File ID: >D1696

Level: (low/med) LOW (CA) 10-26-90 Date Received: 10/17/90.

% Moisture: not dec. 87 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. A4750

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750

Sample wt/vol: 5 (g/mL) G Lab File ID: >D1696

Level: (low/med) LOW Date Received: 10/17/90

% Moisture: not dec. 7 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
	Tetrahydrofuran	11	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A4750

Lab Name: ETCNJ | Laboratory | Contract:

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

Matrix: (soil/water) SOIL | Lab Sample ID: CA4750V

Sample wt/vol: 5.0 (g/mL) G | Lab File ID: >D1696

Level: (low/med) LOW | Date Received: 10/17/90

% Moisture: not dec. 7 | Date Analyzed: 10/24/90

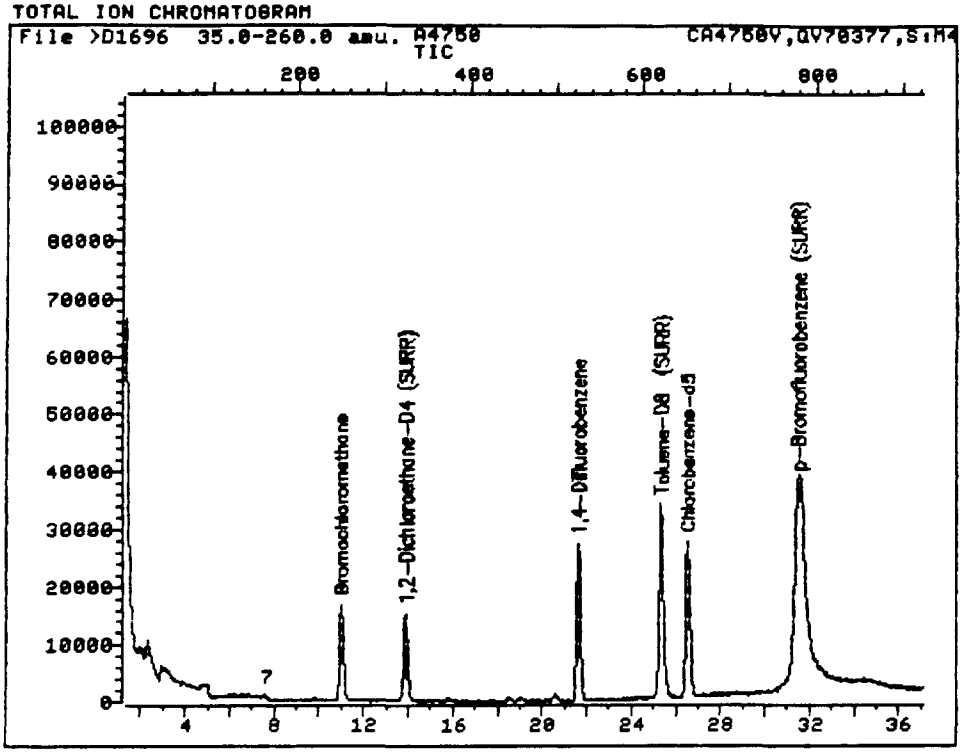
Column: (pack/cap) PACK | Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >D1696::U0 Quant Output File: ^D1696::AQ
Name: A4750
Misc: CA4750V,QV70377,S:M4,4.65,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

Operator ID: KB6656
Quant Time: 901024 16:54
Injected at: 901024 16:16

QUANT REPORT Page 1

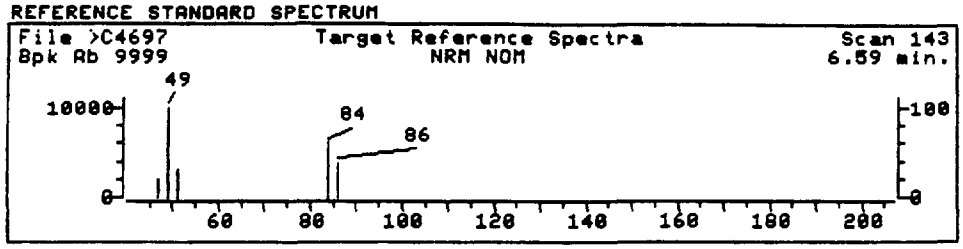
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901024 16:54
Output File: ^D1696::AQ Injected at: 901024 16:16
Data File: >D1696::U0 Dilution Factor: 1.00000
Name: A4750
Misc: CA4750V,QV70377,S:M4,4.65,,

ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

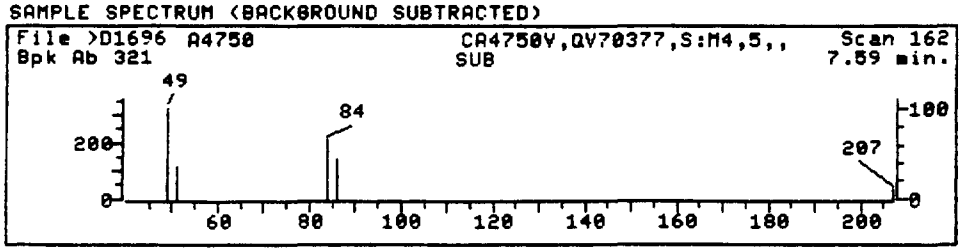
	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.00	250	30397	250.00	NG	97
7)	Methylene chloride	7.59	162	3256	17.82	NG	95
18)	1,2-Dichloroethane-D4 (SURR)	13.91	325	79377	252.38	NG	93
20)	*1,4-Difluorobenzene	21.66	525	115292	250.00	NG	98
36)	*Chlorobenzene-d5	26.55	651	91780	250.00	NG	74
41)	Toluene-D8 (SURR)	25.38	621	136997	255.94	NG	93
45)	p-Bromofluorobenzene (SURR)	31.52	779	104578	263.03	NG	89

* Compound is ISTD

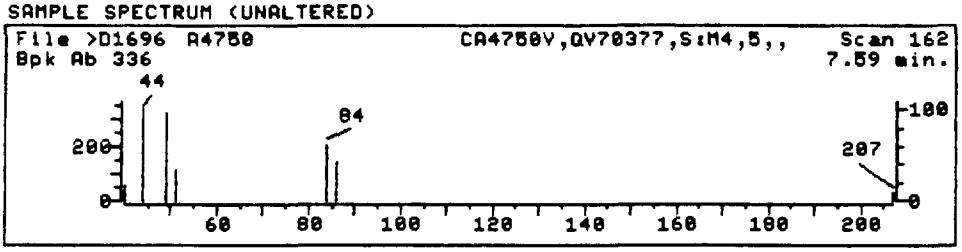
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >D1696::U0 Quant Output File: ^D1696::AQ
Name: A4750
Misc: CA4750U,QV70377,S:M4,5,,
Quant Time: 901024 16:54 Quant ID File: ID0276::PF
Injected at: 901024 16:16 Last Calibration: 901024 12:53

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 162
Retention Time: 7.59 min.
Quant Ion: 84.0
Area: 3256
Concentration: 17.82 NG
q-value: 95

STANDARDS DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETCNJ | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date(s) 10/23/90 10/23/90

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>D1674 RRF50 =>D1673
RRF100=>D1672 RRF150=>D1671 RRF200=>D1670

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	RRF	% RSD
Chloromethane #	1.162	1.098	1.070	1.063	1.032	1.085	4.5#
Bromomethane	1.304	1.056	.234	.340	.326	.652	75.4
Vinyl Chloride *	1.621	1.534	1.467	1.489	1.421	1.506	5.0*
Chloroethane	.956	.897	.831	.897	.888	.894	5.0
Methylene Chloride	1.885	.579	.527	.527	1.016	.907	64.4
Acetone	.917	.522	.501	.500	.522	.592	30.7
Carbon Disulfide	5.023	4.599	4.570	4.683	4.849	4.745	4.0
1,1-Dichloroethene *	1.627	1.468	1.473	1.499	1.507	1.515	4.3*
1,1-Dichloroethane #	3.356	3.059	3.066	3.107	3.139	3.145	3.9#
1,2-Dichlorethene (total)	1.745	1.542	1.572	1.612	1.660	1.626	4.9
Chloroform *	3.940	3.869	3.809	3.700	3.614	3.787	3.4*
1,2-Dichloroethane	3.057	3.077	3.060	2.971	2.823	2.998	3.5
2-Butanone	.040	.030	.033	.032	.032	.033	11.6
1,1,1-Trichloroethane	.667	.700	.672	.640	.625	.661	4.4
Carbon Tetrachloride	.571	.626	.606	.581	.578	.592	3.9
Vinyl Acetate	.210	.408	.397	.438	.488	.388	27.3
Bromodichloromethane	.638	.640	.633	.609	.589	.622	3.6
1,2-Dichloropropane *	.407	.358	.361	.362	.363	.370	5.5*
cis-1,3-Dichloropropene	.931	.874	.893	.882	.863	.889	2.9
Trichloroethene	.508	.474	.468	.458	.451	.472	4.7
Dibromochloromethane	.568	.563	.556	.531	.505	.545	4.8
1,1,2-Trichloroethane	.327	.305	.304	.298	.284	.304	5.1
Benzene	1.131	1.055	1.054	1.045	1.028	1.063	3.8
trans-1,3-Dichloropropene	.223	.208	.209	.201	.192	.207	5.4
Bromoform #	.439	.433	.458	.445	.440	.443	2.1#
4-Methyl-2-Pentanone	.521	.475	.459	.410	.389	.451	11.7
2-Hexanone	.356	.329	.366	.328	.275	.331	10.7
Tetrachloroethene	.629	.579	.569	.545	.539	.572	6.3
1,1,2,2-Tetrachloroethane #	.655	.605	.643	.598	.552	.610	6.7#
Toluene *	1.050	.965	.981	.964	.943	.981	4.2*
Chlorobenzene #	1.306	1.233	1.243	1.214	1.180	1.235	3.7#
Ethylbenzene *	.612	.584	.580	.564	.556	.579	3.7*
Styrene	1.387	1.296	1.283	1.247	1.244	1.292	4.5
Xylene (total)	.721	.721	.720	.695	.688	.719	4.5
Toluene-d8	1.589	1.529	1.548	1.515	1.517	1.539	2.0
Bromofluorobenzene	1.060	1.038	1.023	1.001	1.024	1.029	2.1
1,2-Dichloroethane-d4	2.257	2.529	2.557	2.578	2.608	2.506	5.7

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ETCNJ Contract: _____

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

Instrument ID: GC/MS D Calibration Date(s): 10/23/90 10/23/90

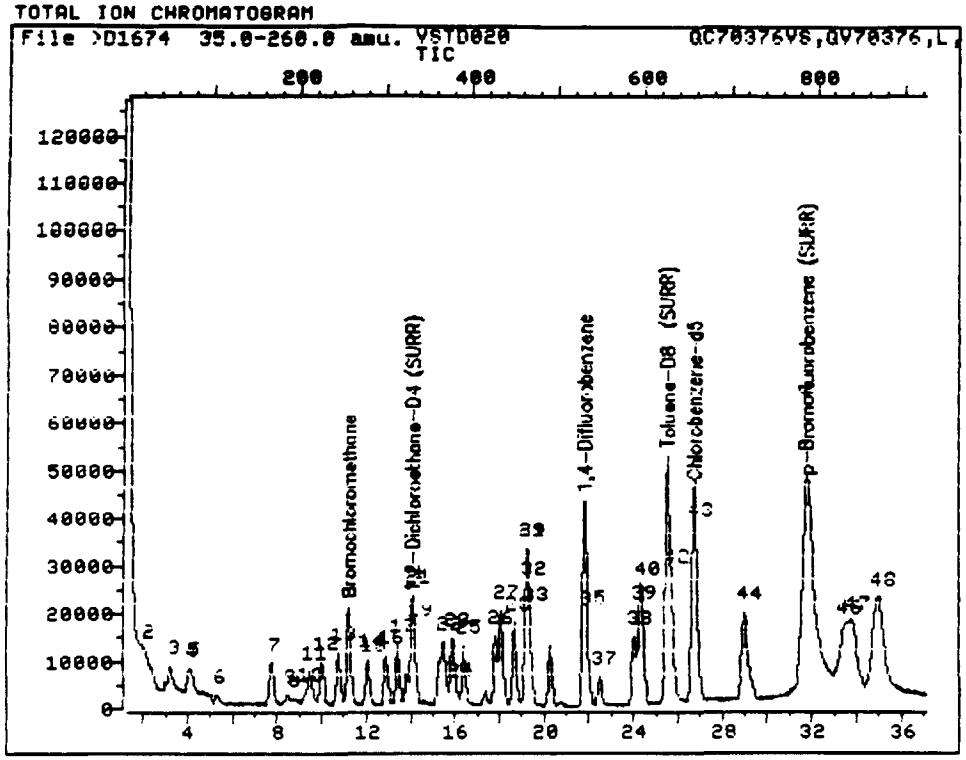
Matrix: (soil/water) SOIL Level: (low/med) LOW Column: (pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >D1674 RRF50 = >D1673
RRF100= >D1672 RRF150= >D1671 RRF200= >D1670

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Tetrahydrofuran	.358	.214	.263	.243	.263	.268	20.1

TOTAL ION CHROMATOGRAM



Data File: >D1674::U0 Quant Output File: ^D1674::AU
Name: VSTD020
Misc: QC70376VS,QV70376,L,5,

Id File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

Operator ID: KB6656
Quant Time: 901023 14:49
Injected at: 901023 14:11

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 14:49
Output File: ^D1674::AQ Injected at: 901023 14:11
Data File: >D1674::U0 Dilution Factor: 1.0000
Name: VSTD020
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.21	257	37888	250.00	NG	98
2)	Methyl chloride	2.14	23	17606	138.07	NG	95
3)	Methyl bromide	3.22	51	19766	119.73	NG	94
4)	Dichlorodifluoromethane	4.08	73	32955	206.62	NG	97
5)	Vinyl chloride	4.12	74	24573	101.65	NG	95
6)	Chloroethane	5.32	105	14490	94.82	NG	94
7)	Methylene chloride	7.72	167	28563	94.75	NG	97
8)	Acrolein	8.61	190	8543	860.97	NG	93
9)	Acetone	8.42	185	13900	60.71	NG	97
10)	Acrylonitrile	9.27	207	9811	172.56	NG	95
11)	Carbon disulfide	9.47	212	76127	142.56	NG	98
12)	Trichlorofluoromethane	10.01	226	49366	164.80	NG	97
13)	1,1-Dichloroethylene	10.79	246	24654	71.48	NG	93
14)	1,1-Dichloroethane	12.07	279	50856	117.97	NG	97
15)	Tetrahydrofuran	12.10	280	5421	5415.54	NG	100
16)	1,2-Trans-dichloroethylene	12.38	300	26439	87.20	NG	95
17)	Chloroform	13.42	314	59719	108.58	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	14.08	331	85506	221.11	NG	89
19)	1,2-Dichloroethane	14.20	334	46329	93.44	NG	97
20)	*1,4-Difluorobenzene	21.80	530	187427	250.00	NG	98
21)	Methyl ethyl ketone	14.12	332	2998	21.21	NG	86
22)	1,1,1-Trichloroethane	15.52	368	50001	85.56	NG	97
23)	Carbon tetrachloride	15.52	368	6726	12.97	NG	93
23)	Carbon tetrachloride	15.91	378	42780	82.49	NG	97
24)	Vinyl acetate	16.10	383	15721	36.58	NG	97
25)	Dichlorobromomethane	16.41	391	47797	95.99	NG	99
26)	1,2-Dichloropropane	17.81	427	30482	102.01	NG	96
27)	cis-1,3-Dichloropropylene	18.08	434	69793	163.42	NG	94
28)	Trichloroethylene	18.66	449	38093	110.70	NG	94
29)	Chlorodibromomethane	19.24	464	42559	114.67	NG	95
30)	bis(Chloromethyl)ether	19.24	464	13195	298.20	NG	100
31)	Benzene	19.24	464	84829	91.31	NG	93
32)	1,1,2-Trichloroethane	19.36	467	24488	94.60	NG	90
33)	trans-1,3-Dichloropropylene	19.40	468	16692	37.35	NG	93
35)	Bromoform	21.96	534	32949	155.02	NG	96
36)	*Chlorobenzene-d5	26.72	656	141216	250.00	NG	78
37)	Methyl-iso-butyl ketone	22.50	548	29440	122.14	NG	96
38)	2-Hexanone	24.05	588	20083	92.23	NG	89
39)	1,1,2,2-Tetrachloroethane	24.28	594	36989	96.76	NG	97
40)	Tetrachloroethylene	24.40	597	35525	75.49	NG	98
41)	Toluene-D8 (SURR)	25.52	626	224329	249.83	NG	97
42)	Toluene	25.72	631	59330	54.88	NG	98
43)	Chlorobenzene	26.83	659	73778	92.50	NG	97

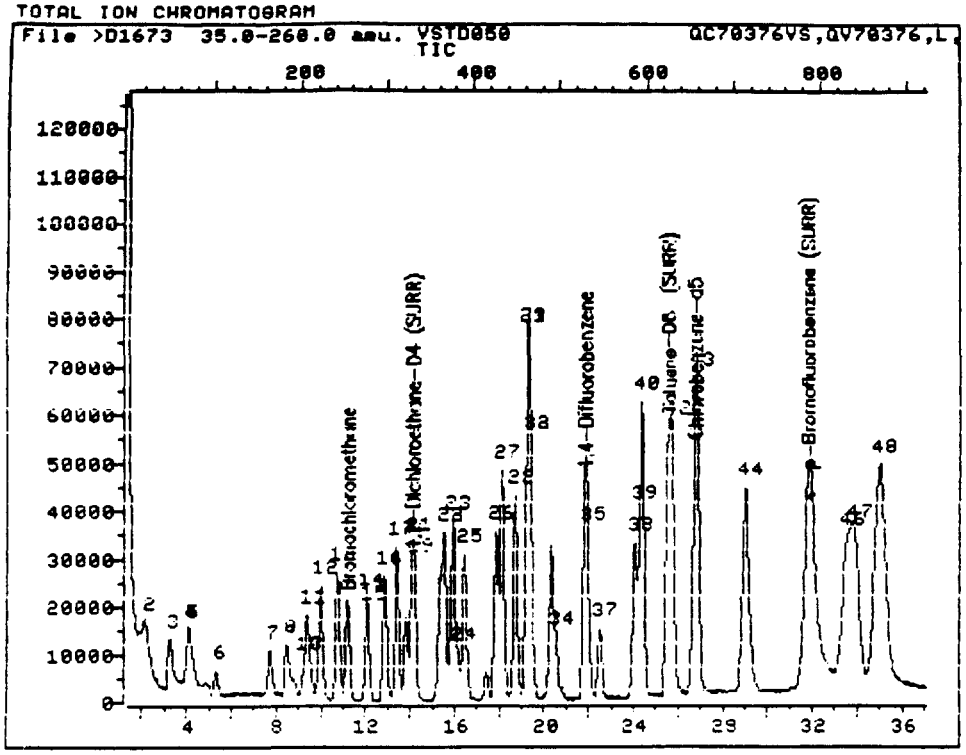
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 14:49
Output File: ^D1674::AQ Injected at: 901023 14:11
Data File: >D1674::U0 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
44)	Ethylbenzene	29.01	715	34576	23.23	NG	80
45)	p-Bromofluorobenzene (SURR)	31.26	786	149752	259.73	NG	86
46)	Styrene	33.47	830	78342	66.97	NG	94
47)	m-Xylene	33.82	839	47632	33.07	NG	95
48)	o+p-Xylenes	34.94	868	87126	31.70	NG	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1673::UO Quant Output File: ^D1673::AQ
Name: VSTD050
Misc: QC70376VS,QV70376,L,5,

Id File: ID0275::US
Title: IFB, PP/VOA, XVUA13, NJTSK3
Last Calibration: 901023 12:18

Operator ID: KB6656
Quant Time: 901023 14:07
Injected at: 901023 13:29

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 14:07
Output File: ^D1673::AQ Injected at: 901023 13:29
Data File: >D1673::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.20	255	39015	250.00	NG	95
2)	Methyl chloride	2.17	22	42840	326.27	NG	97
3)	Methyl bromide	3.25	50	41217	242.46	NG	98
4)	Dichlorodifluoromethane	4.07	71	74668	454.63	NG	97
5)	Vinyl chloride	4.14	73	59830	240.35	NG	95
6)	Chloroethane	5.31	103	34988	222.33	NG	96
7)	Methylene chloride	7.71	165	22592	72.78	NG	96
8)	Acrolein	8.49	185	65224	6383.43	NG	92
9)	Acetone	8.49	185	20378	86.43	NG	95
10)	Acrylonitrile	9.26	205	22447	383.40	NG	92
11)	Carbon disulfide	9.42	209	179445	326.33	NG	99
12)	Trichlorofluoromethane	10.00	224	132480	429.47	NG	94
13)	1,1-Dichloroethylene	10.37	244	57269	161.25	NG	91
14)	1,1-Dichloroethane	12.05	277	119338	268.83	NG	97
15)	Tetrahydrofuran	12.13	279	8358	8108.40	NG	100
16)	1,2-Trans-dichloroethylene	12.87	298	60160	192.68	NG	95
17)	Chloroform	13.41	312	150960	266.54	NG	97
18)	1,2-Dichloroethane-D4 (SURR)	14.11	330	98651	247.73	NG	93
19)	1,2-Dichloroethane	14.23	333	120059	235.14	NG	97
20)	*1,4-Difluorobenzene	21.83	529	194136	250.00	NG	98
21)	Methyl ethyl ketone	14.19	332	5824	39.77	NG	94
22)	1,1,1-Trichloroethane	15.54	367	135953	224.59	NG	97
23)	Carbon tetrachloride	15.54	367	16964	31.58	NG	98
23)	Carbon tetrachloride	15.93	377	121508	226.20	NG	96
24)	Vinyl acetate	16.16	383	79170	177.85	NG	99
25)	Dichlorobromomethane	16.44	390	124154	240.72	NG	98
26)	1,2-Dichloropropane	17.87	427	69539	224.68	NG	95
27)	cis-1,3-Dichloropropylene	18.14	434	169668	383.55	NG	93
28)	Trichloroethylene	18.72	449	92091	258.37	NG	93
29)	Chlorodibromomethane	19.27	463	109230	284.13	NG	91
30)	bis(Chloromethyl)ether	19.27	463	31549	688.36	NG	100
31)	Benzene	19.27	463	204885	212.91	NG	95
32)	1,1,2-Trichloroethane	19.42	467	59303	221.17	NG	88
33)	trans-1,3-Dichloropropylene	19.42	467	40386	87.25	NG	99
34)	2-Chloroethylvinyl ether	20.55	496	33677	201.05	NG	100
35)	Bromoform	21.98	533	84034	381.72	NG	96
36)	*Chlorobenzene-d5	26.72	655	147547	250.00	NG	78
37)	Methyl-iso-butyl ketone	22.53	547	70075	278.24	NG	97
38)	2-Hexanone	24.08	587	48536	213.33	NG	91
39)	1,1,2,2-Tetrachloroethane	24.27	592	89227	223.39	NG	99
40)	Tetrachloroethylene	24.39	595	85385	173.65	NG	98
41)	Toluene-D8 (SURR)	25.55	625	225570	240.43	NG	97
42)	Toluene	25.75	630	142317	125.99	NG	97

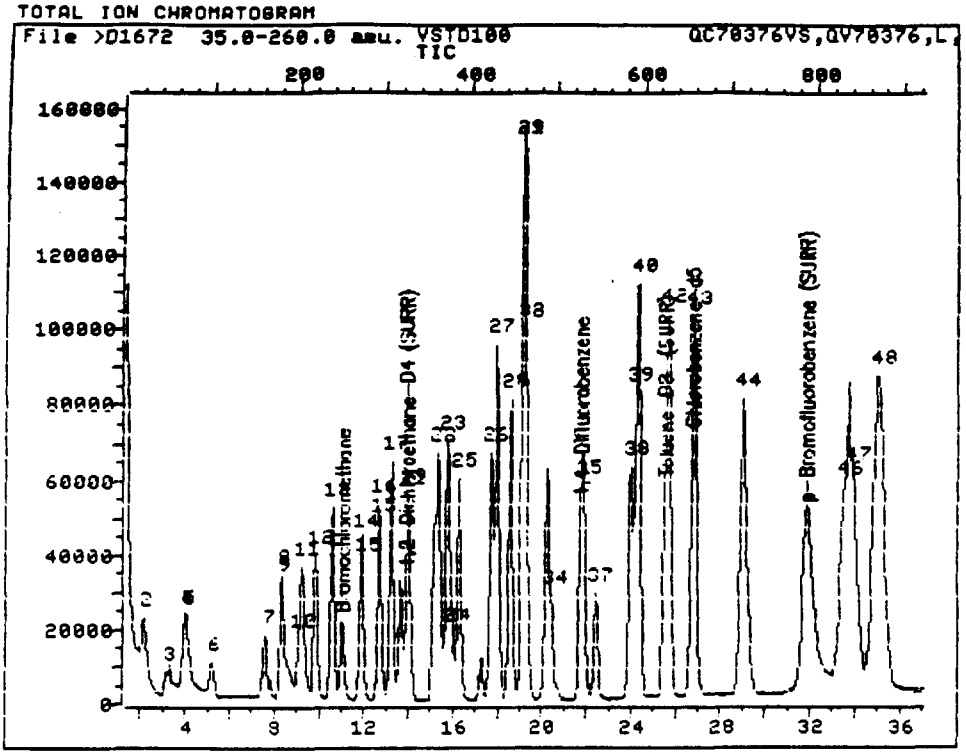
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 14:07
Output File: ^D1673::AQ Injected at: 901023 13:29
Data File: >D1673::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IF8, PP/V0A, XV0A13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Chlorobenzene	26.84	658	181901	218.27	NG	98
44)	Ethylbenzene	29.01	714	86094	55.35	NG	80
45)	p-Bromofluorobenzene (SURR)	31.81	786	153176	254.27	NG	86
46)	Styrene	33.55	831	191161	156.39	NG	99
47)	m-Xylene	33.90	840	116591	77.48	NG	96
48)	o+p-Xylenes	35.03	869	212859	74.13	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1672::U0 Quant Output File: ^D1672::AQ
Name: VSTD100
Misc: QC70376VS,QV70376,L,5,

Id File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

Operator ID: KB6656
Quant Time: 901023 13:22
Injected at: 901023 12:44

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 13:22
Output File: ^D1672::AQ Injected at: 901023 12:44
Data File: >D1672::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.04	251	38487	250.00	NG	94
2)	Methyl chloride	2.12	21	82366	635.90	NG	9?
3)	Methyl bromide	3.17	48	18031	107.52	NG	9?
4)	Dichlorodifluoromethane	3.95	68	134182	828.19	NG	97
5)	Vinyl chloride	4.02	70	112941	459.93	NG	9?
6)	Chloroethane	5.19	100	63994	412.23	NG	9?
7)	Methylene chloride	7.59	162	40591	132.55	NG	9?
8)	Acrolein	8.33	181	229921	22810.94	NG	9?
9)	Acetone	8.37	182	38546	165.74	NG	98
10)	Acrylonitrile	9.10	201	52614	911.00	NG	9?
11)	Carbon disulfide	9.26	205	351761	648.47	NG	9?
12)	Trichlorofluoromethane	9.84	220	218018	716.47	NG	9?
13)	1,1-Dichloroethylene	10.62	240	113379	323.62	NG	96
14)	1,1-Dichloroethane	11.90	273	236038	539.00	NG	97
15)	Tetrahydrofuran	11.98	275	20234	19899.03	NG	100
15)	Tetrahydrofuran	12.67	293	5313	5225.04	NG	100
16)	1,2-Trans-dichloroethylene	12.71	294	120987	392.82	NG	95
17)	Chloroform	13.26	308	293184	524.76	NG	9?
18)	1,2-Dichloroethane-D4 (SURR)	13.91	325	98396	250.48	NG	95
19)	1,2-Dichloroethane	14.03	328	235568	467.70	NG	9?
20)	*1,4-Difluorobenzene	21.75	527	188547	250.00	NG	99
21)	Methyl ethyl ketone	13.99	327	12374	87.01	NG	9?
22)	1,1,1-Trichloroethane	15.35	362	253363	430.95	NG	98
23)	Carbon tetrachloride	15.35	362	32704	62.69	NG	9?
23)	Carbon tetrachloride	15.78	373	228679	438.34	NG	98
24)	Vinyl acetate	16.01	379	149684	346.23	NG	99
25)	Dichlorobromomethane	16.28	386	238736	476.61	NG	98
26)	1,2-Dichloropropane	17.72	423	135944	452.26	NG	93
27)	cis-1,3-Dichloropropylene	17.99	430	336919	784.22	NG	94
28)	Trichloroethylene	18.61	446	176448	509.72	NG	95
29)	Chlorodibromomethane	19.15	460	209789	561.87	NG	93
30)	bis(Chloromethyl)ether	19.15	460	60748	1364.73	NG	100
31)	Benzene	19.15	460	397506	425.32	NG	95
32)	1,1,2-Trichloroethane	19.31	464	114711	440.49	NG	90
33)	trans-1,3-Dichloropropylene	19.31	464	78960	175.65	NG	93
34)	2-Chloroethylvinyl ether	20.43	493	67596	415.50	NG	100
35)	Bromoform	21.91	531	172700	807.73	NG	97
36)	*Chlorobenzene-d5	26.73	655	139497	250.00	NG	76
37)	Methyl-iso-butyl ketone	22.45	545	128127	538.10	NG	94
38)	2-Hexanone	24.00	585	102169	474.98	NG	93
39)	1,1,2,2-Tetrachloroethane	24.23	591	179438	475.17	NG	98
40)	Tetrachloroethylene	24.35	594	158670	341.30	NG	97
41)	Toluene-D8 (SURR)	25.51	624	215953	243.46	NG	98

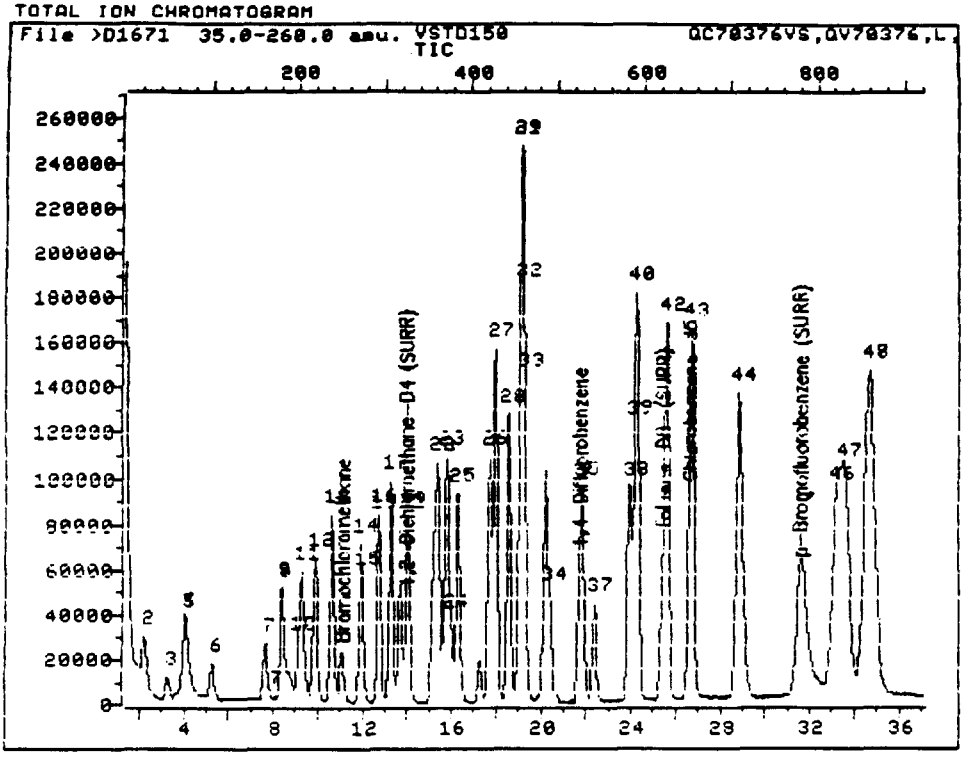
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 13:22
Output File: ^D1672::AQ Injected at: 901023 12:44
Data File: >D1672::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	25.71	629	273689	256.27	NG	98
43)	Chlorobenzene	26.84	658	346702	440.03	NG	96
44)	Ethylbenzene	29.05	719	161774	110.01	NG	80
45)	p-Bromofluorobenzene (SURR)	31.85	787	142717	250.58	NG	82
46)	Styrene	33.56	831	358034	309.82	NG	97
47)	m-Xylene	33.94	841	217037	152.56	NG	97
48)	o+p-Xylenes	35.07	870	401668	147.95	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1671::UU Quant Output File: ^D1671::AQ
Name: VSTD150
Misc: QC70376VS,QV70376,L,5,

Id File: IUU275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

Operator ID: KB6656
Quant Time: 901023 12:38
Injected at: 901023 12:00

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 12:38
Output File: ^D1671::AQ Injected at: 901023 12:00
Data File: >D1671::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/V0A, XV0A13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.10	251	40917	250.00	NG	95
2)	Methyl chloride	2.21	22	130510	947.75	NG	99
3)	Methyl bromide	3.26	49	41776	234.33	NG	96
4)	Dichlorodifluoromethane	4.04	69	214143	1243.23	NG	96
5)	Vinyl chloride	4.11	71	182791	700.18	NG	96
6)	Chloroethane	5.28	101	110131	667.30	NG	95
7)	Methylene chloride	7.64	162	64704	198.75	NG	96
7)	Methylene chloride	8.07	173	2410	7.40	NG	97
8)	Acrolein	8.38	181	340407	31766.79	NG	94
9)	Acetone	8.42	182	61365	248.18	NG	99
10)	Acrylonitrile	9.16	201	79322	1291.88	NG	94
11)	Carbon disulfide	9.31	205	574897	996.89	NG	99
12)	Trichlorofluoromethane	9.89	220	360228	1113.51	NG	96
13)	1,1-Dichloroethylene	10.67	240	184030	494.08	NG	94
14)	1,1-Dichloroethane	11.95	273	381363	819.14	NG	98
15)	Tetrahydrofuran	12.03	275	29847	27609.66	NG	100
15)	Tetrahydrofuran	12.72	293	6784	6275.47	NG	100
16)	1,2-Trans-dichloroethylene	12.76	294	197875	604.30	NG	94
17)	Chloroform	13.31	308	454232	764.73	NG	99
18)	1,2-Dichloroethane-D4 (SURR)	13.97	325	105490	252.59	NG	96
19)	1,2-Dichloroethane	14.08	328	364703	681.09	NG	98
20)	*1,4-Difluorobenzene	21.73	525	209445	250.00	NG	99
21)	Methyl ethyl ketone	14.04	327	19964	126.37	NG	93
22)	1,1,1-Trichloroethane	15.40	362	402309	616.02	NG	99
23)	Carbon tetrachloride	15.40	362	49851	86.02	NG	97
23)	Carbon tetrachloride	15.79	372	364880	629.62	NG	99
24)	Vinyl acetate	16.02	378	275504	573.68	NG	99
25)	Dichlorobromomethane	16.29	385	382541	687.49	NG	98
26)	1,2-Dichloropropane	17.73	422	227615	681.68	NG	92
27)	cis-1,3-Dichloropropylene	18.00	429	553973	1160.78	NG	95
28)	Trichloroethylene	18.58	444	287685	748.14	NG	90
29)	Chlorodibromomethane	19.17	459	333937	805.13	NG	93
30)	bis(Chloromethyl)ether	19.17	459	96729	1956.24	NG	100
31)	Benzene	19.17	459	656769	632.61	NG	95
32)	1,1,2-Trichloroethane	19.28	462	187050	646.60	NG	90
33)	trans-1,3-Dichloropropylene	19.32	463	126575	253.47	NG	94
34)	2-Chloroethylvinyl ether	20.41	491	111674	617.95	NG	100
35)	Bromoform	21.84	528	279335	1176.11	NG	97
36)	*Chlorobenzene-d5	26.62	651	158456	250.00	NG	81
37)	Methyl-iso-butyl ketone	22.42	543	194775	720.14	NG	96
38)	2-Hexanone	23.98	583	156080	638.79	NG	97
39)	1,1,2,2-Tetrachloroethane	24.17	588	284275	662.72	NG	98
40)	Tetrachloroethylene	24.29	591	258972	490.41	NG	99

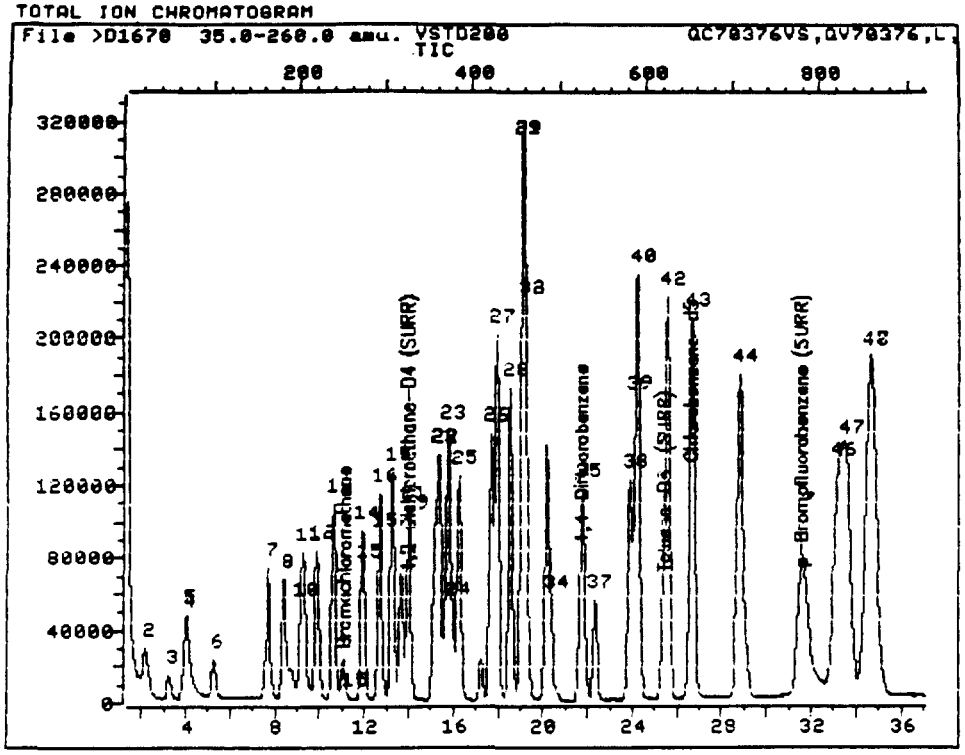
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 12:38
Output File: ^D1671::AQ Injected at: 901023 12:00
Data File: >D1671::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
41)	Toluene-D8 (SURR)	25.45	621	239991	238.19	NG	99
42)	Toluene	25.65	626	458428	377.89	NG	98
43)	Chlorobenzene	26.74	654	576942	644.63	NG	97
44)	Ethylbenzene	28.87	709	268255	160.60	NG	79
45)	p-Bromofluorobenzene (SURR)	31.59	779	158666	245.25	NG	85
46)	Styrene	33.22	821	592951	451.71	NG	97
47)	m-Xylene	33.61	831	359789	222.64	NG	97
47)	m-Xylene	34.70	859	588325	364.06	NG	95
48)	o+p-Xylenes	34.70	859	661042	214.36	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1670::UO Quant Output File: ^D1670::AQ
Name: VSTD200
Misc: QC70376VS,QV70376,L,5,

Id File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

Operator ID: KB6656
Quant Time: 901023 12:20
Injected at: 901023 11:14

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 12:20
Output File: ^D1670::AQ Injected at: 901023 11:14
Data File: >D1670::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.07	251	40291	250.00	NG	95
2)	Methyl chloride	2.19	22	166284	1226.30	NG	99
3)	Methyl bromide	3.23	49	52529	299.22	NG	98
4)	Dichlorodifluoromethane	4.01	69	271627	1601.46	NG	98
5)	Vinyl chloride	4.05	70	229042	890.97	NG	98
6)	Chloroethane	5.25	101	143034	880.13	NG	93
7)	Methylene chloride	7.69	164	163717	510.69	NG	98
8)	Acrolein	8.39	182	435763	41297.23	NG	94
9)	Acetone	8.43	183	84160	345.66	NG	96
10)	Acrylonitrile	9.17	202	101642	1681.11	NG	96
11)	Carbon disulfide	9.28	205	781521	1376.23	NG	99
12)	Trichlorofluoromethane	9.90	221	466278	1463.71	NG	94
13)	1,1-Dichloroethylene	10.64	240	242920	662.32	NG	94
14)	1,1-Dichloroethane	11.92	273	505955	1103.64	NG	97
15)	Tetrahydrofuran	11.34	258	2848	2675.45	NG	100
15)	Tetrahydrofuran	12.00	275	42413	39843.30	NG	100
15)	Tetrahydrofuran	12.66	292	9901	9301.12	NG	100
15)	Tetrahydrofuran	13.28	308	3990	3748.25	NG	100
16)	1,2-Trans-dichloroethylene	12.70	293	267458	829.50	NG	96
17)	Chloroform	13.28	308	582453	995.83	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.94	325	105062	255.47	NG	95
19)	1,2-Dichloroethane	14.06	328	454975	862.88	NG	99
20)	*1,4-Difluorobenzene	21.70	525	211568	250.00	NG	99
21)	Methyl ethyl ketone	14.02	327	27176	170.29	NG	94
22)	1,1,1-Trichloroethane	15.38	362	529096	802.02	NG	96
23)	Carbon tetrachloride	15.34	361	66796	114.10	NG	98
23)	Carbon tetrachloride	15.76	372	488935	835.22	NG	99
24)	Vinyl acetate	16.00	378	412788	850.92	NG	99
25)	Dichlorobromomethane	16.27	385	498111	886.21	NG	98
26)	1,2-Dichloropropane	17.70	422	307419	911.45	NG	94
27)	cis-1,3-Dichloropropylene	17.94	428	730591	1515.50	NG	95
28)	Trichloroethylene	18.56	444	382065	983.61	NG	92
29)	Chlorodibromomethane	19.10	458	427040	1019.28	NG	92
30)	bis(Chloromethyl)ether	19.10	458	126392	2530.49	NG	100
31)	Benzene	19.10	458	869632	829.23	NG	96
32)	1,1,2-Trichloroethane	19.26	462	240157	821.85	NG	91
33)	trans-1,3-Dichloropropylene	19.26	462	162471	322.09	NG	95
34)	2-Chloroethylvinyl ether	20.38	491	130027	712.29	NG	100
35)	Bromoform	21.82	528	372422	1552.30	NG	98
36)	*Chlorobenzene-d5	26.60	651	162175	250.00	NG	81
37)	Methyl-iso-butyl ketone	22.36	542	252279	911.36	NG	97
38)	2-Hexanone	23.91	582	178285	712.93	NG	94
39)	1,1,2,2-Tetrachloroethane	24.14	588	357813	815.03	NG	96

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901023 12:20
Output File: ^D1670::AQ Injected at: 901023 11:14
Data File: >D1670::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70376VS,QV70376,L,5,

ID File: ID0275::US
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 12:18

	Compound	R.T.	Scan#	Area	Conc	Units	q
40)	Tetrachloroethylene	24.26	591	349409	646.49	NG	97
41)	Toluene-D8 (SURR)	25.39	620	245961	238.52	NG	97
42)	Toluene	25.58	625	611677	492.65	NG	98
43)	Chlorobenzene	26.71	654	765644	835.86	NG	97
44)	Ethylbenzene	28.81	708	360980	211.15	NG	80
45)	p-Bromofluorobenzene (SURR)	31.53	778	166017	250.73	NG	88
46)	Styrene	33.20	821	807274	600.87	NG	98
47)	m-Xylene	33.55	830	488221	295.18	NG	96
47)	m-Xylene	34.63	858	799410	483.33	NG	97
48)	o+p-Xylenes	34.63	858	892337	282.72	NG	90

* Compound is ISTD

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETCNJ | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date: 10/24/90 Time: 1207

Lab File ID: >D1691 Init Calib. Dates(s): 10/23/90 10/23/90

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Chloromethane #	1.085	.970	10.6#
Bromomethane	.652	1.181	81.0
Vinyl Chloride *	1.506	1.649	9.4*
Chloroethane	.894	.927	3.7
Methylene Chloride	.907	1.503	65.7
Acetone	.592	.792	33.7
Carbon Disulfide	4.745	4.822	1.6
1,1-Dichloroethene *	1.515	1.559	2.9*
1,1-Dichloroethane #	3.145	3.200	1.8#
1,2-Dichlorethene (total)	1.626	1.604	1.3
Chloroform *	3.787	4.098	8.2*
1,2-Dichloroethane	2.998	3.371	12.5
2-Butanone	.033	.038	13.8
1,1,1-Trichloroethane	.661	.959	45.1
Carbon Tetrachloride	.592	.878	48.2
Vinyl Acetate	.388	.487	25.6
Bromodichloromethane	.622	.769	23.7
1,2-Dichloropropane *	.370	.337	9.1*
cis-1,3-Dichloropropene	.889	.919	3.4
Trichloroethene	.472	.529	12.1
Dibromochloromethane	.545	.669	22.8
1,1,2-Trichloroethane	.304	.321	5.7
Benzene	1.063	1.021	3.9
trans-1,3-Dichloropropene	.207	.236	14.1
Bromoform #	.443	.552	24.5#
4-Methyl-2-Pentanone	.451	.474	5.2
2-Hexanone	.331	.378	14.2
Tetrachloroethene	.572	.626	9.4
1,1,2,2-Tetrachloroethane #	.610	.616	.9#
Toluene *	.981	.907	7.5*
Chlorobenzene #	1.235	1.254	1.5#
Ethylbenzene *	.579	.592	2.3*
Styrene	1.292	1.349	4.5
Xylene (total)	.719	.774	7.6
Toluene-d8	1.539	1.458	5.3
Bromofluorobenzene	1.029	1.083	5.2
1,2-Dichloroethane-d4	2.506	2.587	3.2

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ETCNJ Contract: _____

Lab Code: F2 Case No.: _____ SAS No.: _____ SDG No.: _____

Instrument ID: GC/MS D Calibration Date: 10/24/90 Time: 1207

Lab File ID: >D1691 Init. Calib. Date(s): 10/23/90 10/23/90

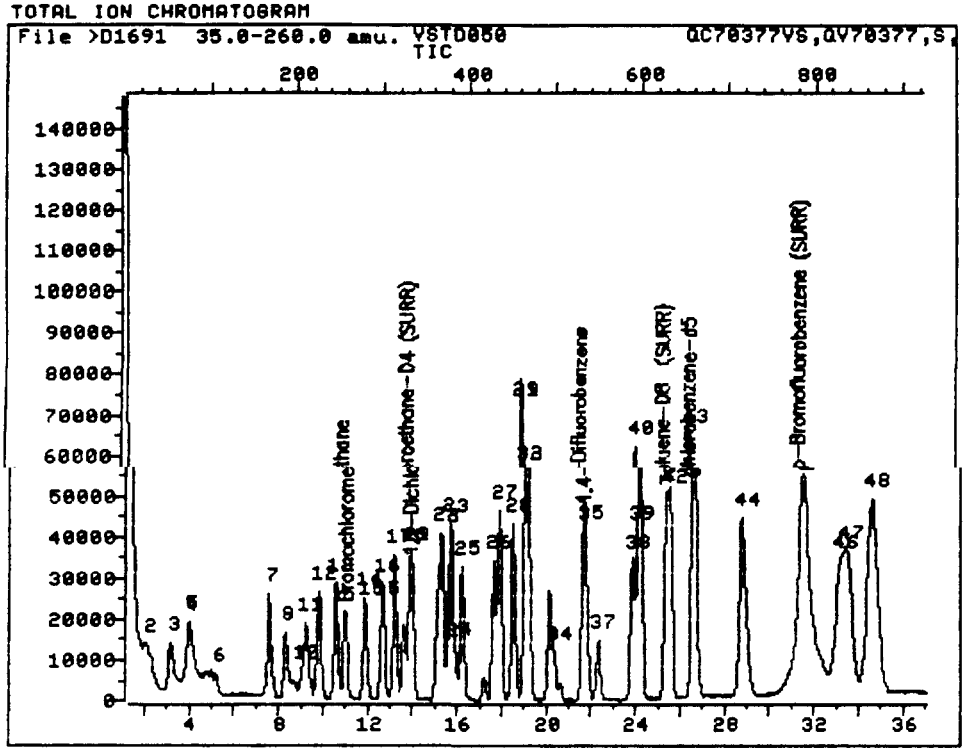
Matrix: (soil/water) SOIL Level: (low/med) LOW Column: (pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND	$\overline{RRF}$	RRF50	%D
Tetrahydrofuran	.268	.244	8.9
*			*
#			#
*			*
*			*
#			#
#			#
*			*
#			#
*			*
Toluene-d8			
Bromofluorobenzene			
1,2-Dichloroethane-d4			

FORM VII VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D1691::U0 Quant Output File: ^D1691::AQ
Name: VSTD050
Misc: QC70377VS,QV70377,S,5,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 15:09

Operator ID: JA8781
Quant Time: 901024 12:45
Injected at: 901024 12:07

Operator ID: JA8781 Quant Rev: 7 Quant Time: 901024 12:45
Output File: ^D1691::AQ Injected at: 901024 12:07
Data File: >D1691::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70377VS,QV70377,S,5,,

ID File: ID0276::PF
Title: IFB, PP/V0A, XV0A13, NJTSK3
Last Calibration: 901023 15:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.00	251	39862	250.00	NG	95
2)	Methyl chloride	2.12	22	38671	223.54	NG	95
3)	Methyl bromide	3.17	49	47059	452.50	NG	99
4)	Dichlorodifluoromethane	3.98	70	88516	299.70	NG	99
5)	Vinyl chloride	4.02	71	65714	273.57	NG	94
6)	Chloroethane	5.18	101	36955	259.31	NG	97
7)	Methylene chloride	7.59	163	59895	414.24	NG	99
8)	Acrolein	8.32	182	102407	4802.18	NG	94
9)	Acetone	8.32	182	31588	334.37	NG	89
10)	Acrylonitrile	9.06	201	26274	414.14	NG	96
11)	Carbon disulfide	9.26	206	192209	254.05	NG	99
12)	Trichlorofluoromethane	9.84	221	144665	296.24	NG	95
13)	1,1-Dichloroethylene	10.57	240	62156	257.34	NG	94
14)	1,1-Dichloroethane	11.89	274	127578	254.38	NG	97
15)	Tetrahydrofuran	11.93	275	9738	227.70	NG	100
15)	Tetrahydrofuran	12.63	293	2662	62.24	NG	100
16)	1,2-Trans-dichloroethylene	12.67	294	63957	246.69	NG	95
17)	Chloroform	13.21	308	163374	270.59	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.91	326	103111	258.10	NG	96
19)	1,2-Dichloroethane	13.99	328	134376	281.13	NG	98
20)	*1,4-Difluorobenzene	21.67	526	167079	250.00	NG	97
21)	Methyl ethyl ketone	13.99	328	6336	284.38	NG	95
22)	1,1,1-Trichloroethane	15.31	362	160195	362.67	NG	98
23)	Carbon tetrachloride	15.31	362	16855	42.58	NG	99
23)	Carbon tetrachloride	15.73	373	146614	370.40	NG	98
24)	Vinyl acetate	15.93	378	81446	313.98	NG	97
25)	Dichlorobromomethane	16.24	386	128500	309.36	NG	99
26)	1,2-Dichloropropane	17.67	423	56232	227.31	NG	95
27)	cis-1,3-Dichloropropylene	17.94	430	153493	258.45	NG	94
28)	Trichloroethylene	18.53	445	88416	280.32	NG	88
29)	Chlorodibromomethane	19.07	459	111737	307.03	NG	92
30)	bis(Chloromethyl)ether	19.11	460	32623	303.98	NG	100
31)	Benzene	19.07	459	170665	240.28	NG	90
32)	1,1,2-Trichloroethane	19.22	463	53592	264.17	NG	92
33)	trans-1,3-Dichloropropylene	19.22	463	39397	285.20	NG	89
34)	2-Chloroethylvinyl ether	20.35	492	26769	234.20	NG	100
35)	Bromoform	21.78	529	92146	311.24	NG	96
36)	*Chlorobenzene-d5	26.56	652	132473	250.00	NG	77
37)	Methyl-iso-butyl ketone	22.37	544	62842	263.07	NG	93
38)	2-Hexanone	23.92	584	50035	285.47	NG	90
39)	1,1,2,2-Tetrachloroethane	24.11	589	81582	252.20	NG	98
40)	Tetrachloroethylene	24.23	592	82875	273.45	NG	99
41)	Toluene-D8 (SURR)	25.39	622	193149	236.80	NG	95

Operator ID: JA8781 Quant Rev: 7 Quant Time: 901024 12:45
Output File: ^D1691::AQ Injected at: 901024 12:07
Data File: >D1691::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70377VS,QV70377,S,5,,

ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901023 15:09

	Compound	R.T.	Scan#	Area	Conc	Units	q
42)	Toluene	25.58	627	120151	231.22	NG	97
43)	Chlorobenzene	26.68	655	166121	253.82	NG	96
44)	Ethylbenzene	28.81	710	78475	255.67	NG	79
45)	p-Bromofluorobenzene (SURR)	31.49	779	143468	263.03	NG	92
46)	Styrene	33.20	823	178771	261.22	NG	89
47)	m-Xylene	33.51	831	110081	264.92	NG	94
48)	o+p-Xylenes	34.63	860	205059	538.15	NG	88

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETCNJ Contract:

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

Lab File ID (Standard): >D1691 Data Analyzed: 10/24/90

Instrument ID: GC/MS D Time Analyzed: 1207

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

	IS1(BCM) AREA	#	RT	IS2(DFB) AREA	#	RT	IS3(CBZ) AREA	#	RT
12 HOUR STD	39862		11.00	167079		21.67	132473		26.56
UPPER LIMIT	79724			334158			264946		
LOWER LIMIT	19931			83540			66236		
	EPA SAMPLE NO.								
01	VBLK01		38215	11.05	169627	21.67	130360		26.60
02	A4750MS		33205	11.00	133388	21.66	106331		26.56
03	A4750MSD		31083	11.00	121036	21.66	95481		26.56
04	A4750		30397	11.00	115292	21.66	91780		26.55
05	A4749		30659	11.00	120136	21.66	93702		26.55
06	A4976		32869	11.03	125934	21.65	102639		26.55
07	A4976MS		35932	11.01	130555	21.63	106312		26.53
08	A4976MSD		32753	11.00	119784	21.66	95052		26.55
09									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

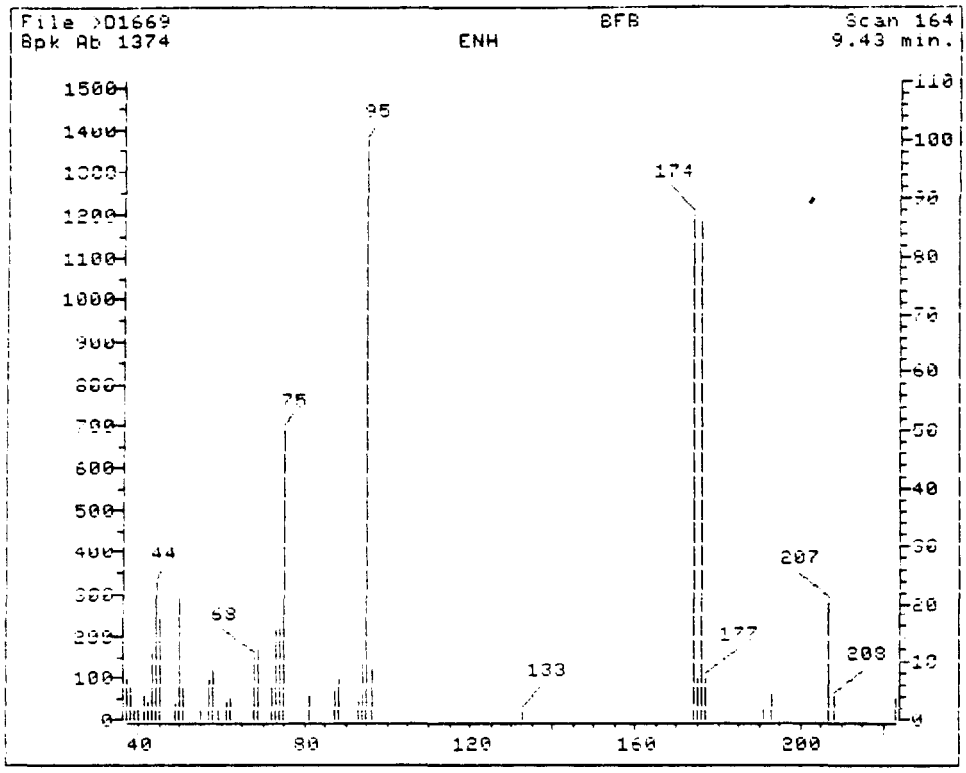
UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

RAW QC DATA

MS Data File: >D1669::U0

Name: ..... Operator: KB6656 Date/Time: 10/23/90 10:28
Misc: BFB



MS Data File: >D1669::U0

Name: ..... Operator: KB6656 Date/Time: 10/23/90 10:28
Misc: BFB

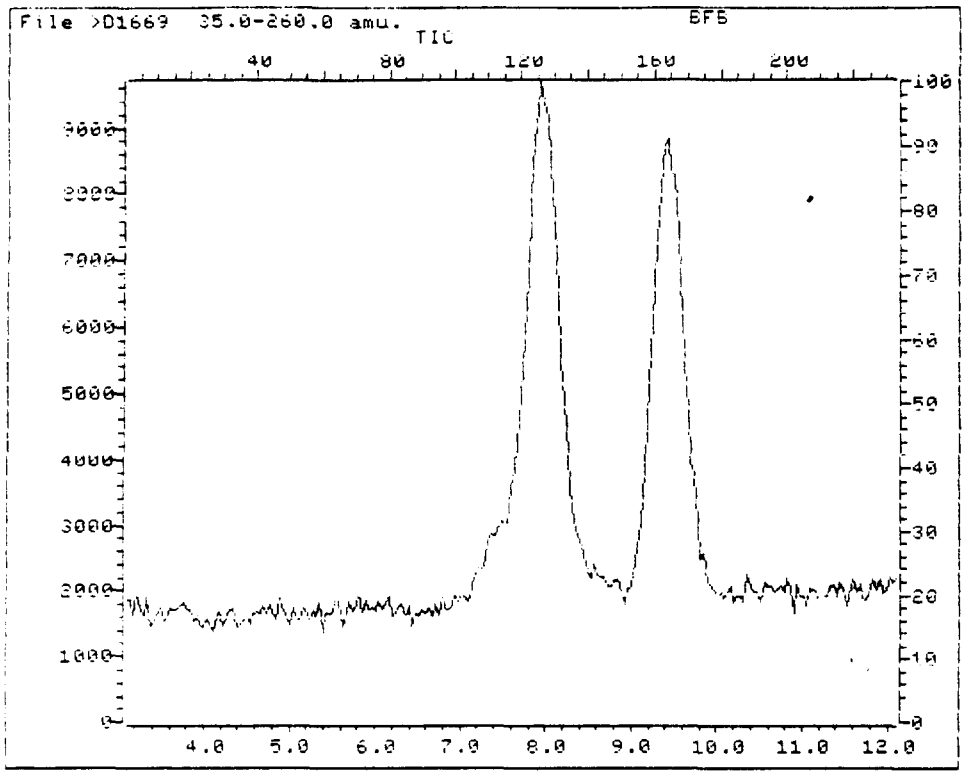
>D1669 BFB
164 NRM ENH

File: >D1669 Scan #: 164 Retn. time: 9.49

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	7.088	48.95	2.838	62.05	3.769	87.05	5.050	174.90	7.233
38.00	5.705	49.95	21.176	67.95	10.930	88.05	7.117	175.90	86.101
39.00	1.863	50.95	5.549	68.95	12.069	93.05	3.187	176.90	7.190
40.00	2.139	54.95	1.572	72.05	5.996	93.95	9.824	191.00	1.907
41.10	4.061	57.05	7.015	73.05	15.311	95.05	100.000	193.00	4.468
42.00	3.129	58.05	8.722	74.05	15.704	96.05	8.630	207.00	20.219
43.00	11.614	59.05	2.067	75.05	50.517	132.90	1.383	208.10	3.900
43.95	23.781	61.05	3.071	80.95	3.988	173.90	87.018	222.95	3.794
45.05	12.450								

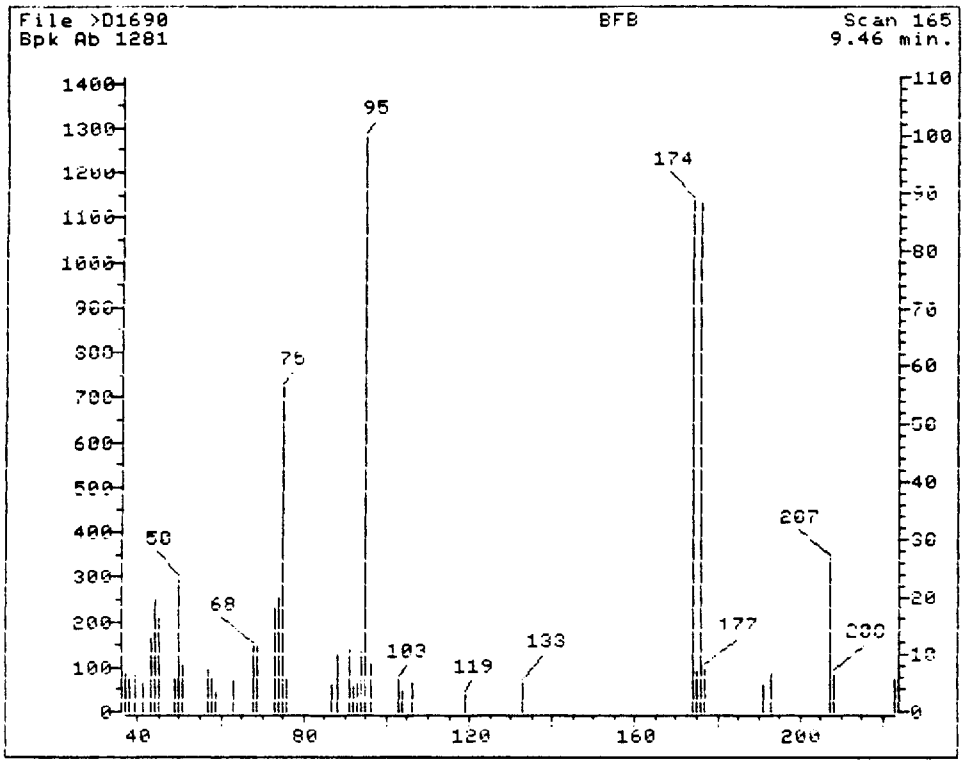
MS Data File: >D1669::U0

Name: ..... Operator: KB6656 Date/Time: 10/23/90 10:28
Misc: BFB



MS Data File: >D1690::U0

Name: ..... Operator: JA8781 Date/Time: 10/24/90 11:40
Misc: BFB



MS Data File: >D1690::U0

Name: ..... Operator: JA8/81 Date/Time: 10/24/90 11:40
Misc: BFB

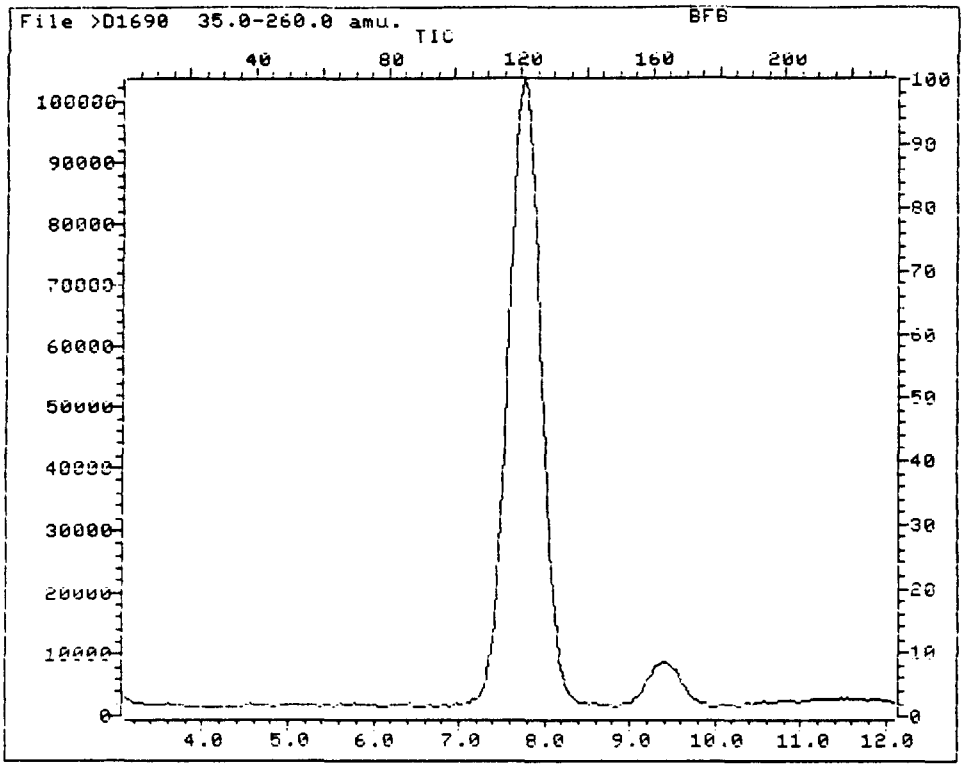
>D1690 BFB
165 NRM

File: >D1690 Scan #: 165 Retn. time: 9.46

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.00	6.635	50.95	8.197	74.95	56.284	99.05	100.000	174.90	7.104
38.00	5.699	57.05	7.416	75.95	5.855	96.05	8.509	175.90	88.447
39.10	6.323	58.05	6.011	86.95	4.606	103.05	5.699	176.80	7.572
41.00	5.074	58.95	3.435	88.05	10.148	104.05	3.669	190.90	4.684
43.10	12.724	62.95	5.464	91.05	10.851	106.05	5.074	192.90	6.635
43.95	19.516	67.95	11.397	92.05	4.450	118.95	3.044	207.10	26.464
45.05	16.315	68.95	11.553	92.95	4.996	132.90	4.996	208.10	6.557
48.95	5.855	72.95	18.189	93.95	10.539	173.90	88.603	222.95	5.621
49.95	22.873	74.05	19.984						

MS Data File: >D1690::U0

Name: ..... Operator: JA8781 Date/Time: 10/24/90 11:40
Misc: BFB



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLK01

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70377V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >D1693

Level: (low/med) LOW Date Received: 10/24/90.

% Moisture: not dec. 0 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	8	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	4	J
591-78-6	2-Hexanone	6	J
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK01

Lab Name: ETC NJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70377

Sample wt/vol: 5 (g/mL) G Lab File ID: >D1693

Level: (low/med) LOW Date Received: 10/24/90

% Moisture: not dec. _____ Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK01

Lab Name: ETCNJ | Laboratory | Contract:

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

Matrix: (soil/water) SOIL | Lab Sample ID: QC70377V

Sample wt/vol: 5.0 (g/mL) G | Lab File ID: >D1693

Level: (low/med) LOW | Date Received: 10/24/90

% Moisture: not dec. 0 | Date Analyzed: 10/24/90

Column: (pack/cap) PACK | Dilution Factor: 1.0

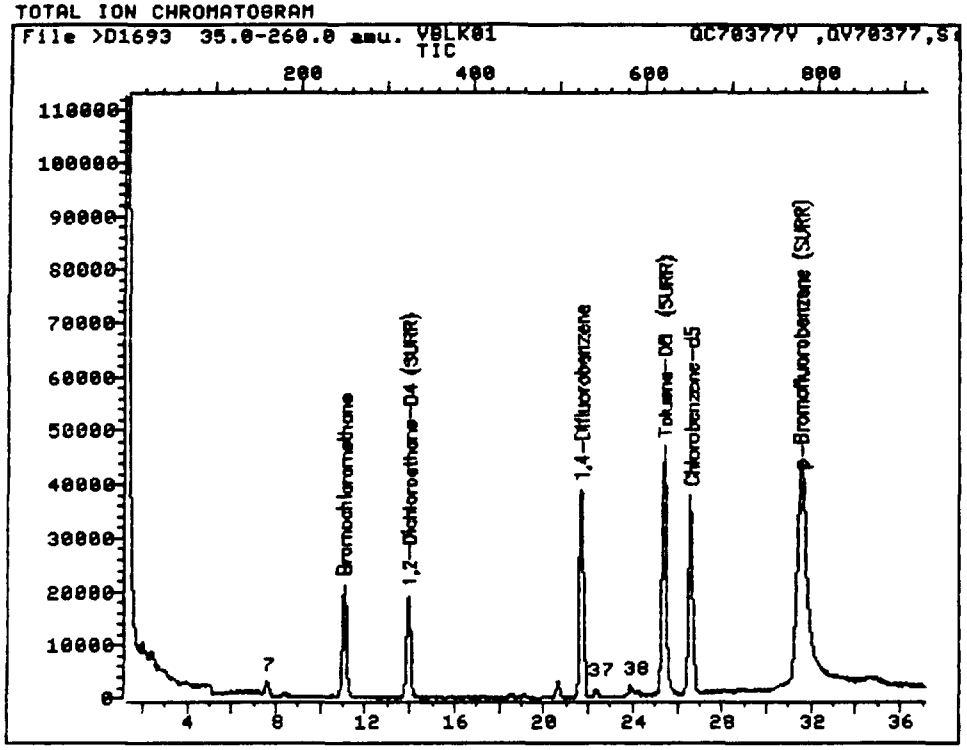
Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01. 110-54-3	Hexane	20.66	4	J
02. 563-58-6	1-Propene, 1,1-dichloro-	23.88	3	J

FORM I VOA-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D1693::U0 Quant Output File: ^D1693::AQ
Name: VBLK01
Misc: QC70377V ,QV70377,S:M4,5,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

Operator ID: JA8781
Quant Time: 901024 14:13
Injected at: 901024 13:36

Operator ID: JA8781 Quant Rev: 7 Quant Time: 901024 14:13
Output File: ^D1693::AQ Injected at: 901024 13:36
Data File: >D1693::U0 Dilution Factor: 1.00000
Name: VBLK01
Misc: QC70377V ,QV70377,S:M4,5,,

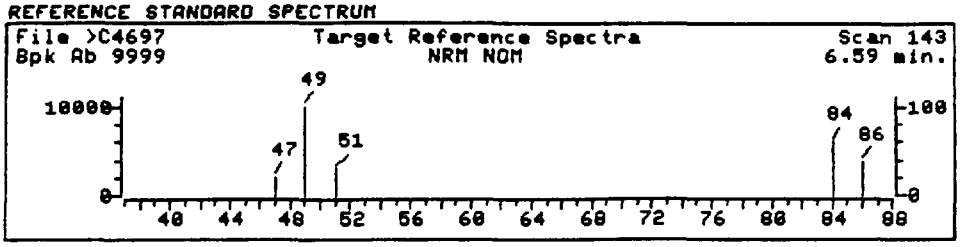
ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.05	252	38215	250.00	NG	95
7)	Methylene chloride	7.56	162	9488	41.31	NG	98
18)	1,2-Dichloroethane-D4 (SURR)	13.96	327	101802	257.46	NG	97
20)	*1,4-Difluorobenzene	21.67	526	169627	250.00	NG	98
36)	*Chlorobenzene-d5	26.60	653	130360	250.00	NG	75
37)	Methyl-iso-butyl ketone	22.37	544	5280	21.35	NG	87
38)	2-Hexanone	23.92	584	6086	30.90	NG	91
41)	Toluene-D8 (SURR)	25.39	622	195003	256.49	NG	94
45)	p-Bromofluorobenzene (SURR)	31.49	779	140472	248.75	NG	89

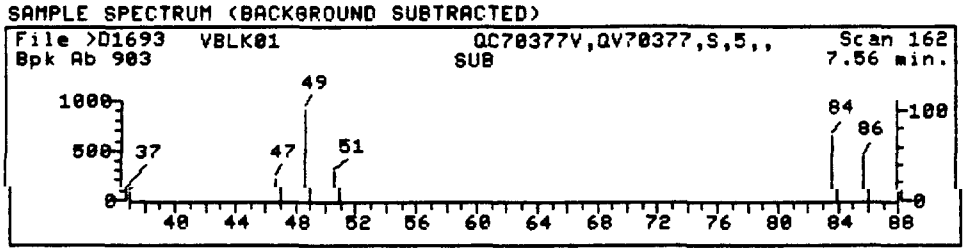
* Compound is ISTD

CN
10-26-90.

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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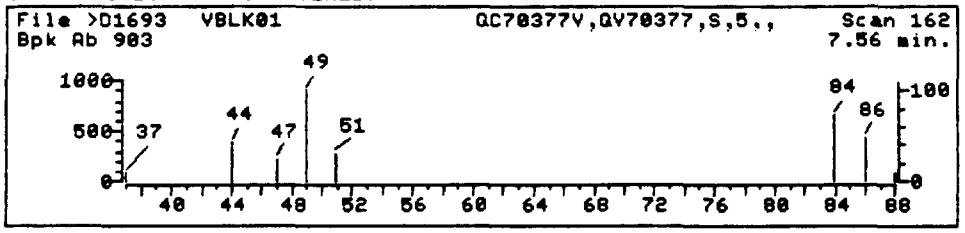
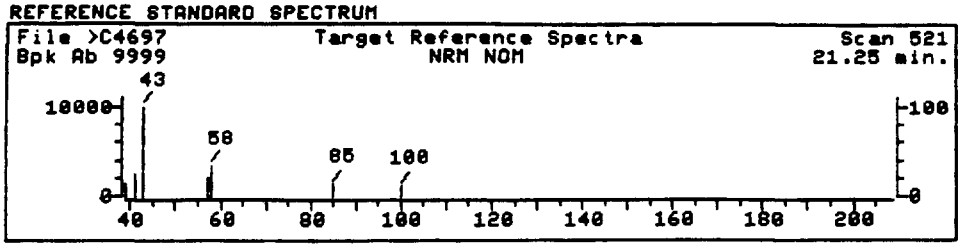


Data File: >D1693::U0 Quant Output File: ^D1693::AQ
Name: VBLK01
Misc: QC70377V,QV70377,S,5,,
Quant Time: 901024 14:13 Quant ID File: ID0276::PF
Injected at: 901024 13:36 Last Calibration: 901024 12:53

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 162
Retention Time: 7.56 min.
Quant Ion: 84.0
Area: 9488
Concentration: 41.31 NG
q-value: 98

REFERENCE STANDARD SPECTRUM



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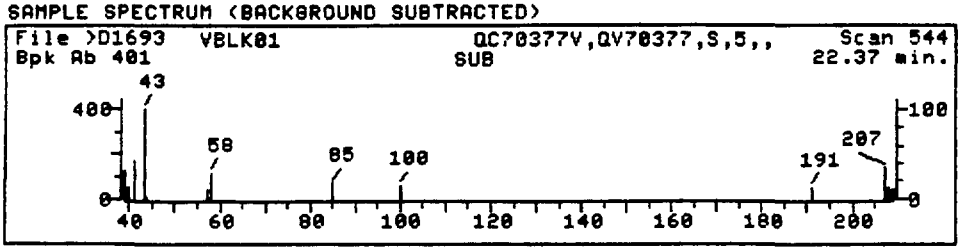

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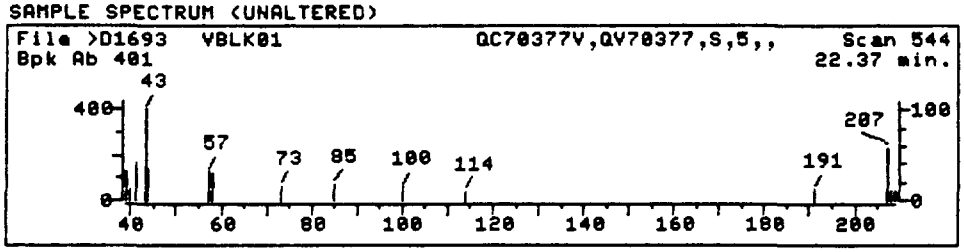

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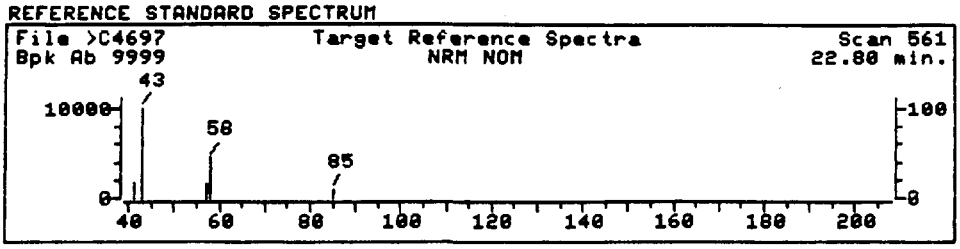
Name: VBLK01
Misc: QC70377V,QV70377,S,5,,
Quant Time: 901024 14:13 Quant ID File: ID0276::PF
Injected at: 901024 13:36 Last Calibration: 901024 12:53

Compound No: 37
Compound Name: Methyl-iso-butyl ketone
Scan Number: 544
Retention Time: 22.37 min.
Quant Ion: 43.0
Area: 5280
Concentration: 21.35 NG
q-value: 87

REFERENCE STANDARD SPECTRUM



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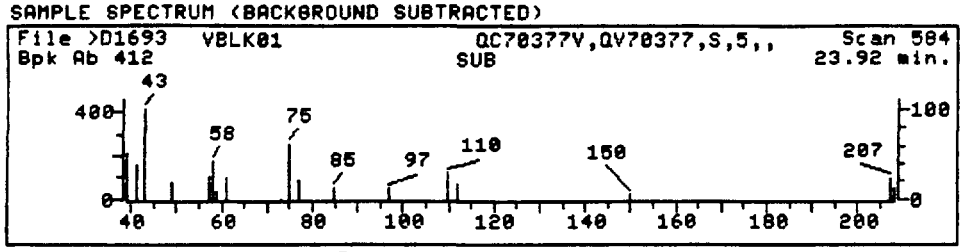

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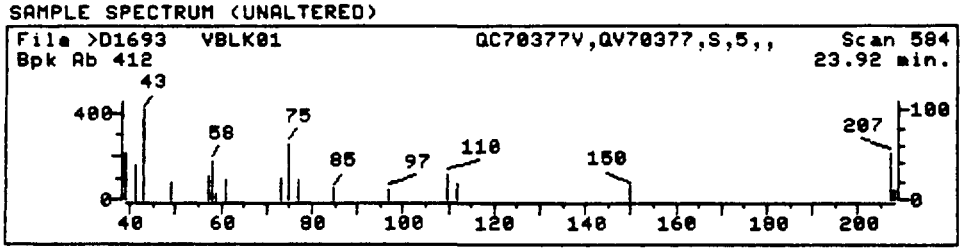
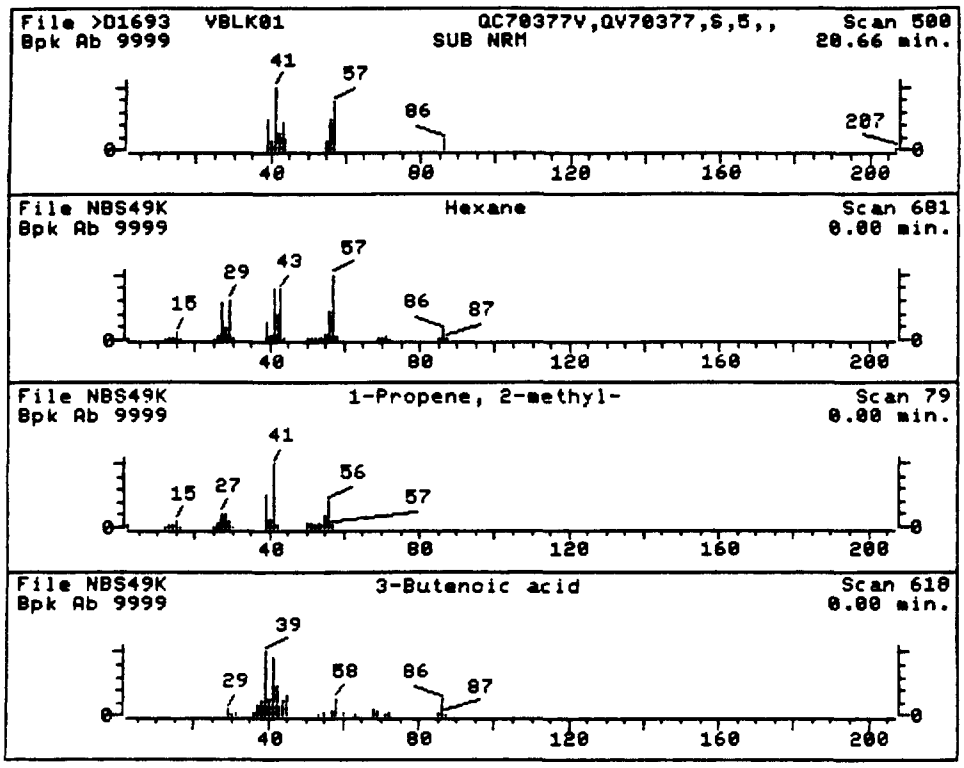


Data File: >D1693::U0
Name: VBLK01
Misc: QC70377V,QV70377,S,5,,
Quant Time: 901024 14:13
Injected at: 901024 13:36

Quant Output File: ^D1693::AQ

Quant ID File: ID0276::PF
Last Calibration: 901024 12:53

Compound No: 38
Compound Name: 2-Hexanone
Scan Number: 584
Retention Time: 23.92 min.
Quant Ion: 43.0
Area: 6086
Concentration: 30.90 NG
q-value: 91

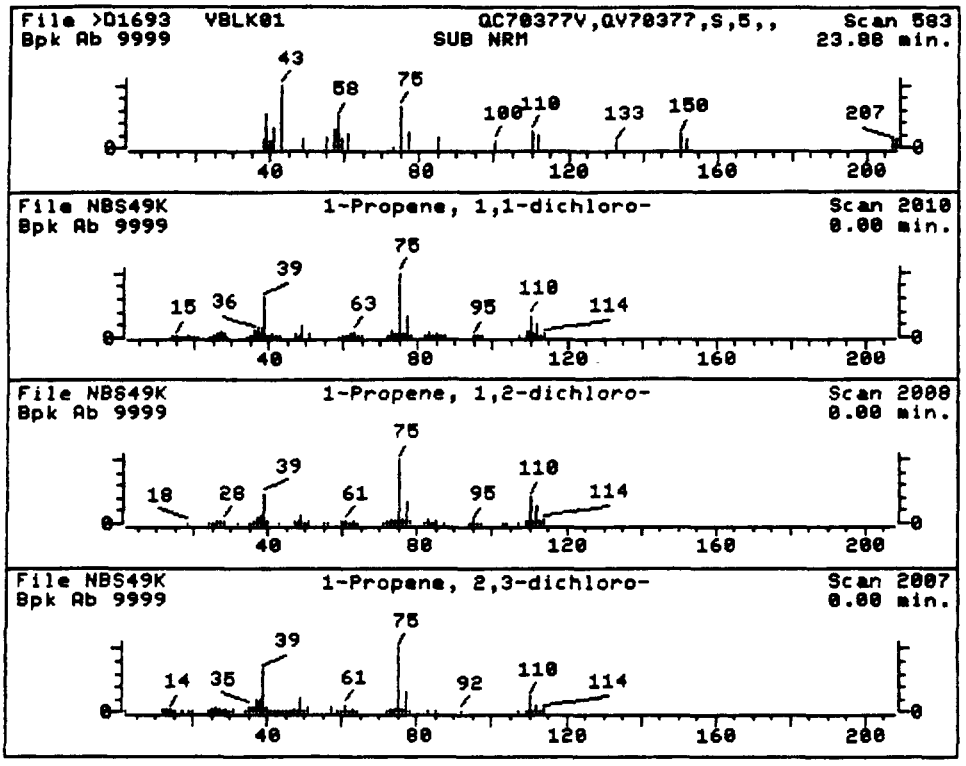


Data File: >D1693::U0
Name: VBLK01
Misc Data: QC70377V,QV70377,S,5,,
RT (min): 20.66
Scan: 500
Area: 38419 Rank: 5
Semi-quantitative Conc (uncorrected): 19.96 NG
Semi-quantitative Conc (corrected): 3.99 ug/kg
Calculated using Istd: 1,4-Difluorobenzene @ 21.67 minutes

1.	Hexane	86 C6H14
2.	1-Propene, 2-methyl-	56 C4H8
3.	3-Butenoic acid	86 C4H6O2

Sample file: >D1693 Spectrum #: 500
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	28*	110543	6971	NBS49K	28	68	2	0	55	36	10	14
2.	25*	115117	997	NBS49K	26	54	2	0	86	50	7	14
3.	15*	625387	191	NBS49K	30	68	3	0	45	60	3	13



Data File: >D1693::U0
Name: VBLK01
Misc Data: QC70377V,QV70377,S,5,,
RT (min): 23.88
Scan: 583
Area: 28217 Rank: 7
Semi-quantitative Conc (uncorrected): 14.66 NG
Semi-quantitative Conc (corrected): 2.93 ug/kg
Calculated using Istd: 1,4-Difluorobenzene @ 21.67 minutes

1.	1-Propene, 1,1-dichloro-	110	C3H4Cl2
2.	1-Propene, 1,2-dichloro-	110	C3H4Cl2
3.	1-Propene, 2,3-dichloro-	110	C3H4Cl2

Sample file: >D1693 Spectrum #: 583
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	563586	4965	NBS49K	50	65	3	0	66	57	3	14
2.	15*	563542	4963	NBS49K	42	69	2	0	65	57	3	14
3.	11*	78886	4962	NBS49K	45	74	2	0	60	63	2	15

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4750MS

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750US

Sample wt/vol: ~~4.6~~ 5.0 (g/mL) G Lab File ID: >D1694

Level: (low/med) LOW CH 10-26-90 Date Received: 10/17/90

% Moisture: not dec. 87 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	4	J
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	52	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	49	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	52	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	51	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4750MS

Lab Name: ETC NJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750VS

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >D1694

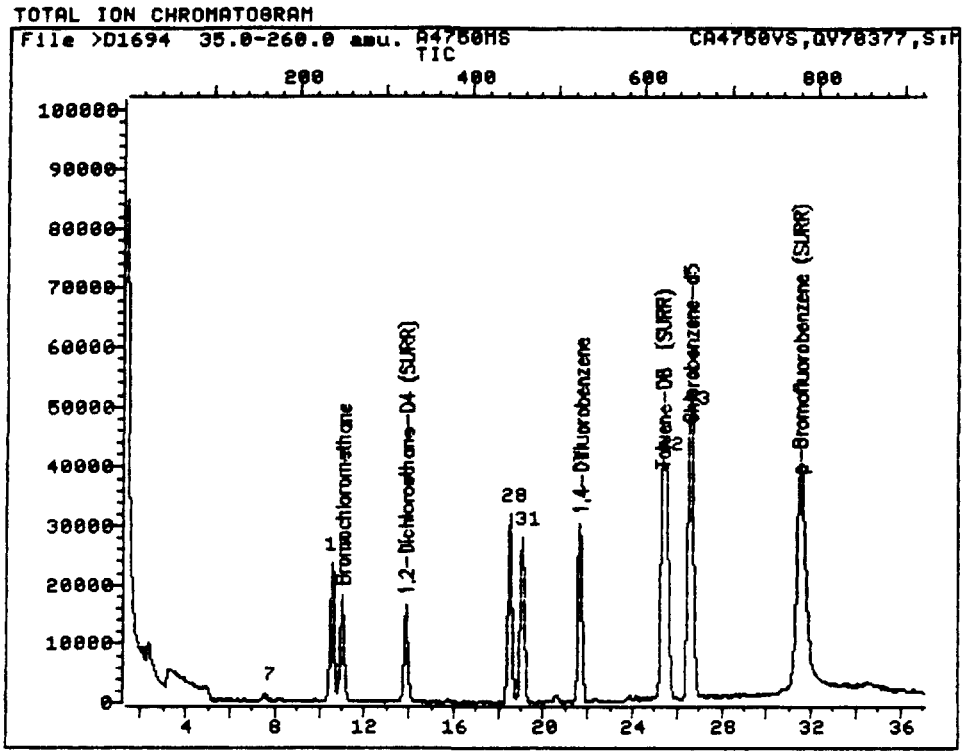
Level: (low/med) LOW Date Received: 10/17/90

% Moisture: not dec. 7 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
	Tetrahydrofuran	11	U

FORM I VOA 1/87 Rev.



Data File: >D1694::U0 Quant Output File: ^D1694::AQ
Name: A4750MS
Misc: CA4750VS,QV70377,S:M4,4.65,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

Operator ID: KB6656
Quant Time: 901024 15:24
Injected at: 901024 14:47

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901024 15:24
Output File: ^D1694::AQ Injected at: 901024 14:47
Data File: >D1694::U0 Dilution Factor: 1.00000
Name: A4750MS
Misc: CA4750VS,QV70377,S:M4,4.65,,

ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.00	250	33205	250.00	NG	98
7)	Methylene chloride	7.59	162	4110	20.59	NG	98
13)	1,1-Dichloroethylene	10.57	239	49896	240.92	NG	91
18)	1,2-Dichloroethane-D4 (SURR)	13.87	324	88144	256.56	NG	95
20)	*1,4-Difluorobenzene	21.66	525	133388	250.00	NG	98
28)	Trichloroethylene	18.52	444	64489	228.40	NG	91
31)	Benzene	19.06	458	131288	240.89	NG	92
36)	*Chlorobenzene-d5	26.56	651	106331	250.00	NG	72
41)	Toluene-D8 (SURR)	25.34	620	155337	250.49	NG	94
42)	Toluene	25.54	625	89004	230.72	NG	97
43)	Chlorobenzene	26.68	654	125558	235.41	NG	97
45)	p-Bromofluorobenzene (SURR)	31.49	778	117257	254.56	NG	89

* Compound is ISTD

CA
10-26-90.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4750MSD

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750VR

Sample wt/vol: ~~4.6~~ 5 (g/mL) G Lab File ID: >D1695

Level: (low/med) LOW @ 10-26-90 Date Received: 10/17/90

% Moisture: not dec. 87 Date Analyzed: 10/24/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	5	U
67-64-1	Acetone	11	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	51	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	11	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	50	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	52	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	50	
108-90-7	Chlorobenzene	51	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4750MSD

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4750VR

Sample wt/vol: 5 (g/mL) G Lab File ID: >D1695

Level: (low/med) _____ Date Received: 10/17/90

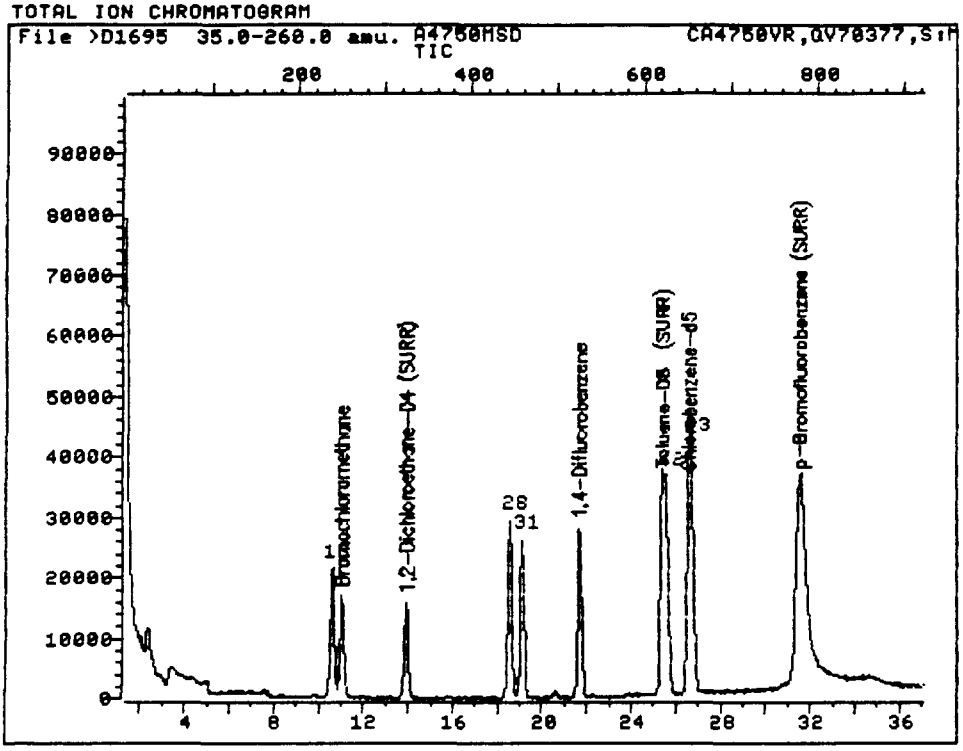
% Moisture: not dec. _____ Date Analyzed: 10/24/90

Column: (pack/cap) _____ Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
	Tetrahydrofuran	11	U

FORM I VOA 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >D1695::U0 Quant Output File: ^D1695::AQ
Name: A4750MSD
Misc: CA4750VR,QV70377,S:M4,4.65,,

Id File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

Operator ID: KB6656
Quant Time: 901024 16:09
Injected at: 901024 15:31

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901024 16:09
Output File: ^D1695::AQ Injected at: 901024 15:31
Data File: >D1695::U0 Dilution Factor: 1.00000
Name: A4750MSD
Misc: CA4750VR,QV70377,S:M4,4.65,,

ID File: ID0276::PF
Title: IFB, PP/VOA, XVOA13, NJTSK3
Last Calibration: 901024 12:53

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.00	250	31083	250.00	NG	95
13)	1,1-Dichloroethylene	10.57	239	46355	239.11	NG	93
18)	1,2-Dichloroethane-D4 (SURR)	13.91	325	88201	274.25	NG	97
20)	*1,4-Difluorobenzene	21.66	525	121036	250.00	NG	97
28)	Trichloroethylene	18.52	444	59630	232.75	NG	91
31)	Benzene	19.10	459	120553	243.77	NG	91
36)	*Chlorobenzene-d5	26.56	651	95481	250.00	NG	74
41)	Toluene-D8 (SURR)	25.38	621	140202	251.77	NG	95
42)	Toluene	25.58	626	81021	233.89	NG	97
43)	Chlorobenzene	26.71	655	114535	239.15	NG	94
45)	p-Bromofluorobenzene (SURR)	31.52	779	106934	258.53	NG	86

* Compound is ISTD

CA
10-26-90.

CHAIN OF CUSTODY

ETC Environmental Testing and Certification Corp.

Seal No. 174689 ETC Job # CA4749

CHAIN OF CUSTODY FORM (CC1) ORIGINAL

Date Sealed 90/08/30 By: MM

Company: WASTE MANAGEMENT, INC. Attn.: DEE BENCICH

Facility/Site: _____ Phone: (708) 409 - 0700

Address: , DANE COUNTY, WI

SAMPLE IDENTIFICATION

Facility: 4105 (Facility Site Code) PZ-17B (42-44) BLS (Optional Sample Point Descriptions)

Sample Point: W-SLPZ17B (Source Code from below; Your Sample Point ID left justify) 90/10/16 (Start Date YY/MM/DD) 0840 (Start Time 2400 hr clock) _____ (Elapsed Hours composite)

Source Codes

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)

Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify Grimy brnkg

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
1	UVS	40	NONE	UNPRES V.SCREEN	N	✓	✓
1	METS	250	NONE	METAL(SOIL)	N	✓	✓
2	UVOA	40	NONE	UNPRES VOA	N	✓	✓
1	TB	40	GC/MS,	TRIP BLANK			✓

CHAIN OF CUSTODY CHRONICLE

1 Shuttle Opened By: (print) DAN GREEN Date: 9-3-90 Time: 1300

Signature: Dan Green Seal #: 0174689 Intact: ✓

2 I have received these materials in good condition from the above person.

Name Jay Johnston Signature: Jay Johnston

Date 10-7-90 Time: 1800 Remarks: intact

3 I have received these materials in good condition from the above person.

Name _____ Signature: _____

Date _____ Time: _____ Remarks: 75

4 Shuttle Sealed By: (print) Jay Johnston Date: 10-16-90 Time: 0940

Signature Jay Johnston Seal #: 017469D Intact: yes

LAB USE ONLY Opened By: A. Stepler Date: 10/17/90 Time: 905

SHUTTLE # 1044 TEMP °C 20 SEAL # 174469 COND Intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
12/89

ETC JOB # CA4764

Sample Point [X] (Source Code) SILAE1/7B (Sample Point I.D)

FIELD PROCEDURES

PURGE DATE (YY MM DD) | START PURGE (2400 Hr Clock) | ELAPSED HRS | WATER VOL. IN CASING (Gallons) | VOLUME PURGED (Gallons)

SAMPLING METHOD: split spoon sampler / stainless steel spatula

Sampler Type [X]
A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel
X-Other: split spoon (SPECIFY OTHER)

Sampler Material [B]
A-Teflon, B-Metal, C-PVC, D-Plastic
X-Other: stainless steel spatula (SPECIFY OTHER)

Tubing Material [ ]
A-Teflon, B-Tygon, C-Polyethylene, D-Silicon
X-Other: (SPECIFY OTHER)

Sample Composited [Y/N] filled bottles from split spoon sample (42'-44') (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)
Depth to Ground water (ft)
Groundwater Elevation (ft msl)
Well Depth (ft) 44.0
Sample Depth (non-well) (ft)

	ph	(STD)	spec. cond.	um/cm at 25 °C	(other parameter)	value	units
1st		(STD)	1st	um/cm at 25 °C		value	units
2nd		(STD)	2nd	um/cm at 25 °C		value	units
3rd		(STD)	3rd	um/cm at 25 °C		value	units
4th		(STD)	4th	um/cm at 25 °C		value	units

Sample Temp (°C) | Turbidity NTU

FIELD COMMENTS

Sample Appearance: red brown sandy till
Weather Conditions: clear 55°
Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) Jay Johnston Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

10-16-90 (Date) Jay Johnston (Signature)

16

ETC Environmental Testing and Certification Corp.

Seal No. 174689 ETC Job # CA4750

CHAIN OF CUSTODY FORM (CC1) ORIGINAL

Date Sealed 90/08/30 By: MM

Company: WASTE MANAGEMENT, INC. Attn.: DEE BENCICH

Facility/Site: _____ Phone: (708) 409 - 0700

Address: , DANE COUNTY, WI

SAMPLE IDENTIFICATION

Facility: [-]015 (Facility/Site Code) PZ-17B (42'-44') BLS (Optional Sample Point Descriptions)

Sample Point: [X]-SLPZ17B (Source Code (from below), Your Sample Point ID (left justify)) | 901016 (Start Date (YY/MM/DD)) | 0846 (Start Time (2400 hr clock)) | (Elapsed Hours (composite))

Source Codes

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys (C) Other (X)
Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify boring

SHUTTLE CONTENTS

BOTTLE				ANALYSIS	SAMPLER		LAB
No	Type	Size	Preserv.		Fill. (Y/N)	Observations	Observations
1	UVOS	40	NONE	UNPRES V. SCREEN	N	✓	✓
1	METS	250	NONE	METAL (SOIL)	N	✓	✓
2	UVOA	40	NONE	UNPRES VOA	N	✓	✓
1	TB	40	GC/MS,	TRIP BLANK			✓

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 9-5-90 Time: 13:00
   Signature: [signature] Seal #: 0174689 Intact: ✓

2. I have received these materials in good condition from the above person.
   Name: Jay Johnston Signature: [signature]
   Date: 10-7-90 Time: 1800 Remarks: [signature]

3. I have received these materials in good condition from the above person.
   Name: _____ Signature: _____
   Date: _____ Time: _____ Remarks: 77

4. Shuttle Sealed By: (print) Jay Johnston Date: 10-16-90 Time: 0940
   Signature: [signature] Seal #: 0174690 Intact: yes

LAB USE ONLY Opened By: [signature] Date: 10/17/90 Time: 905
Cooler # 1644 TEMP °C 2° SEAL # 174190 COND Intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
12/89

ETC JOB # C94750

Sample Point [X] (Source Code) [SLPZ1 TIB] (Sample Point I.D.)

FIELD PROCEDURES

PURGE DATE (YY MM DD) | START PURGE (2400 Hr Clock) | ELAPSED HRS | WATER VOL. IN CASING (Gallons) | VOLUME PURGED (Gallons)

SAMPLING METHOD: split spoon sample/ stainless steel spatula

Sampler Type [X] — A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel — X-Other: split spoon (SPECIFY OTHER)

Sampler Material [B] — A-Teflon, B-Metal, C-PVC, D-Plastic — X-Other: stainless steel spatula (SPECIFY OTHER)

Tubing Material [ ] — A-Teflon, B-Tygon, C-Polyethylene, D-Silicon — X-Other: (SPECIFY OTHER)

Sample Composited (Y/N) filled bottles from split spoon sample (42-44) (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft): 44.0

Sample Depth (non-well) (ft)

	ph	(STD)	spec. cond.	um/cm at 25° C	(other parameter)	value	units
1st		(STD)	1st	um/cm at 25° C			
2nd		(STD)	2nd	um/cm at 25°C			
3rd		(STD)	3rd	um/cm at 25°C			
4th		(STD)	4th	um/cm at 25°C			

Sample Temp (°C) | Turbidity NTU

FIELD COMMENTS

Sample Appearance: red brown sandy till

Weather Conditions: clear 55°

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: Jay Johnston (Print) Employer: PELA 78

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

10-16-96 (Date) Jay Johnston (Signature)

ORIGINAL

ETC CORP.

PERCENT MOISTURE WORKSHEET

QC BATCH: _____

SAMPLE NUMBER	LOG LINK	CRUCIBLE WEIGHT (g)	CRUCIBLE & WET SOIL WEIGHT (g)	WET SOIL WEIGHT (g)	CRUCIBLE & DRY SOIL WEIGHT (g)	DRY SOIL WEIGHT (g)	PERCENT MOISTURE (%)
CA4749	100672	11.96	16.96	5.00	16.54	4.58	8.4
CA4750	↓	10.66	15.69	5.03	15.32	4.66	7.35
CA4749 Dup		11.35	16.35	5.00	15.89	4.54	9.2

COMMENTS: In oven 0-13 at 4:45pm

PERCENT MOISTURE SET-UP: Ken Chapman DATE: 10.25.90

PERCENT MOISTURE COMPLETION: D. Vajda DATE: 10.26.90

SUPERVISOR SIGNATURE: D. Vajda DATE: 10.26.90

ETC Corp. LABORATORY CHRONICLE : GC-MS Department Page 1 of 1

Date 10/23/90 Instr. D

A-Type IFB/VOA
Tune file APEI01
Seq. file KBD
Method file VOAD
ID file IDO275
CB file CDO275
Analyst K. Beach
Reviewed by/Date

Batch #'s QV70376

Standards Updated
Date 10/27/90 By KB

Tape # Inj. ul

Standard	Conc ppm	Lot No.	Lot Vol. (ul)
BFB	50	9871	1
INT STD+SURR	25	10166	10
CALIB I	50	10195	2.5/10/5/20
CALIB II	50	10194	
XVOA	50	9505	

R	NAME	DATA File	Init. ml/g	ALS #	Dil	Inj. Time	Comments	P
	BFB	>D1669	1ul	—		10:28	164 (ENH)	
	QC70376VS	>D1670	5ml	1		11:14	20ul CALIB I+II, XVOA	
	QC70376VS	>D1671		2		12:00	15ul	
	QC70376VS	>D1672		3		12:44	10ul	
	QC70376VS	>D1673		4		13:29	5ul	
	QC70376VS	>D1674		5		14:11	2ul	
	QC70376V	>D1675		6		14:56	OK	Y
	CA4977V	>D1677	5ml	8		15:58	OK	IFB
	CA4977VS	>D1678		9		16:42	OK 10ul matrix spike	
	CA4977VR	>D1679		10		17:27	OK 10ul " "	
	BFB	>D1676	1ul	—		15:38	OK 172 RUN before >D1677	
	CA5086VS	>D1680	5ml	11		18:12	OK 5ul calc I+II, XVOA	
	CA5086VR	>D1681		12		18:57	OK 5ul " " " "	
	CA5086V	>D1682		13		19:42	OK	NSTSK3
	CA5087V	>D1683		14		20:27	OK	
	HA3301V	>D1684		15		21:12	OK	EO
	HA3304V	>D1685		16		21:58	OK	

ETC Corp. LABORATORY CHRONICLE : GC-MS Department 035 Page 1 of 1

Date 10/24/90 Instr. D

A-Type 2IFB|VOA ~~+ CW37543~~ KB 10/24/90
Tune file APET01
Seq. file KBD
Method file VOAD, BFBD
ID file IDO276
CB file ~~CDO276~~ CDO275
Analyst K. Boykin
Reviewed by/Date

Batch #'s QV70377

__ Standards Updated
Date ____ By ____

Tape # ____ Inj. __ ul

Standard	Conc ppm	Lot No.	Lot Vol (ul)
BFB	50	9811	1
INT STD + SURR	25	10166	10
CALIB I	50	10195	2.5, 10, 20
CALIB II	50	10194	↓
XVOA	50	9505	
IFB matrix SPIKE	25	10184	10

R	NAME	DATA File	init. ml/g	ALS #	Dil	Inj. Time	Comments	P
	BFB	>D1690	1ul	-		11:40	OK 165	
	QC70377VS	>D1691	5ml	1	(QCal)	12:07	OK 5 ul ~~all~~ CALIB I+II, XVOA	
	QC70377VS	>D1692	↓	2		12:52	OK 5 ul " " "	
	QC70377V	>D1693	↓	3		13:36	OK	Y
	CA4750VS	>D1694	5gm	4		14:47	OK 10 ul IFB matrix spike	
	CA4750VR	>D1695	↓	5		15:31	OK 10 ul " " "	
	CA4750V	>D1696	↓	6		16:16	OK	Y
	CA4749V	>D1697	2gm	7	1:2.5		NG rr STK	
	CA4749V	>D1698	5gm	8		18:08	OK	Y
	CA4976V	>D1699	↓	9		18:54	OK	Y
	CA4976VS	>D1700	↓	10		19:39	OK 10 ul IFB matrix spike	
	CA4976VR	>D1701	↓	11		20:24	OK 10 ul IFB matrix spike	
	CA5053V	>D1702	5gm	12			NG	Y
	CA5054V	>D1703	↓	13			↓	Y
	CA5055V	>D1704	↓	14			81 NOT	Y
	CA5056V	>D1705	↓	15			↓	Y

OHM Corporation

ETC Environmental Testing and Certification Corp.

Technical Report

for

WASTE MANAGEMENT, INC.

Chain of Custody Data Required for ETC Data Management Summary Reports

CA4720-CA4721 WASTE MANAGEMENT, INC. 405

ETC Sample No.	*Company*	*Facility*	*Sample Point*	*Date*	*Time*	*Elapsed Hours*

Richard P. Albert

Vice President, General Manager

This Technical Report is an INSITE℠ service generated by LODESTAR℠ Data Management Software.

284 Raritan Center Parkway ■ CN 7808 ■ Edison, New Jersey 08818-7808 ■ 201-225-5600

ETC

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CASE NARRATIVE

ETC

SDG NARRATIVE

This technical report submitted by ETC Corporation contains the analytical results and required deliverables for WASTE MANAGEMENT, INC. Site 405 samples as identified below:

ETC ID	CLIENT ID	ETC ID	CLIENT ID
CA4720	SLSB15	CA4721	SLSB15

During the preparation and analysis of these samples, the following was observed:

VOLATILES: (QV70367): Problems were not observed during the analysis of these samples.

SEMIVOLATILES: (QC70282): All samples in this batch were reinjected due to internal standard area counts outside of QC criteria. The repeat analysis revealed internal standard areas still out for the blank and samples.

The blank, matrix spike and matrix spike duplicate contain a low level of Isophorone. The sample CA4720 has Isophorone detected above the method detection limit.

PESTICIDES/PCBS: (QG70282):

There was no apparent explanation for the matrix spike and Dibutylchorendate recoveries exceeding QC limits. Corrective action was not required as spike and surrogate recoveries are advisory only.

Release of the data contained in this hardcopy data package has been authorized by the following signature.

Gregory G. Morrison
Laboratory Manager

11/08/90
Date

File # 000305

METHODOLOGY

INTRODUCTION

Environmental Testing and Certification Corp.
284 Raritan Center Parkway, CN 7808
Edison, New Jersey 08818-7808
(201) 225-6700

This report contains analytical results in tabular form for your sample. It includes comprehensive data for each analytical process. Associated quality control data is also presented, including QC batch results for the laboratory blank, spiked blank, matrix spike and a replicated sample spike, as well as results from surrogate compound analyses. Quality control data for instrument performance is also included. Other appendices may include data system printouts and chain of custody records.

Analytical Methodology

ETC utilizes a wide variety of methodologies and EPA approved procedures which are listed below. Analytical results and Quality Assurance protocols are based upon the approriate guideline dependent upon the level of deliverable requested.

- "Methods of Organic Chemical Analysis of Municipal and Industrial Wastewater", Federal Register Vol. 49, No. 209, October 26, 1984;
- "Test Methods for Evaluating Solid Waste", SW-846 Third Edition, September 1986, USEPA;
- "Standard Methods for the Examination of Water and Wastewater" 1985, 14th, 15th and 16th Edition;
- "Methods for Chemical Analysis of Water and Wastes" March 1983, EMSL, EPA 600 4-79-020;
- Organic Analysis: Multi-media, Multi-Concentration-IFB-CLP, SOW February 1988;
- Inorganic Analysis: Multi-media, Multi-Concentration IFB-CLP, SOW July 1987;
- Dioxin Analysis: Soil/Sediment/Water Matrix; Multi-Concentration, Selected Ion Monitoring with Jar Extraction Procedure; IFB WA86-K357.
- "Methods for the Determination of Organic Compounds in Drinking Water" December 1988, EPA-600/4-88/039;
- "Handbook for Analytical Quality Control in Water and Wastewater Laboratories", EPA-600/4-79-019, March 1979;
- "National Enforcement Investigation Center Policies and Procedures Manual,EPA-330/9/78/001-R, Revised May 1986.

ETC

ETC Network Laboratories are certified to perform analytical analyses upon samples collected throughout the United States. It may be required that this environmental data be reported with reference to a certified laboratory. The Laboratory Identification Numbers for ETC Corp., Edison NJ Laboratory are summarized below for your information and reference. Please contact your Program Manager should you require certification verification for an ETC Network Laboratory.

Certification Summary, January 1990

State Agency	Certification Number
Alabama Department of Environmental Management	40280
Arizona Department of Environmental Quality	322
California Department of Health Services	162
Connecticut Department of Health Services	0511
Florida Department of Health and Rehabilitative Services	E87074 & 87262
Illinois Environmental Protection Agency	100224
Kansas Department of Health and Environment	E-148 & E1122
New Hampshire Department of Environmental Services	198948-B
New Jersey Department of Environmental Protection	12257
New York Department of Public Health	10586
Oklahoma Water Resources Board	8703
Pennsylvania Department of Environmental Regulation	68-323
South Carolina Department of Health and Environmental Control	94002
Tennessee Department of Health and Environmental Laboratory Services	02915
Utah Department of Health	E-91
Virginia Department of General Services	00113
Wisconsin Department of Natural Resources	999464070

VOLATILE DATA

QC SUMMARY

2B
SOIL VOLATILE SURROGATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	VBLK1	94	103	104		0
02	A4720	95	104	104		0
03	A4721	93	105	102		0
04	A4721MS	95	105	105		0
05	A4721MSD	92	106	101		0
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

8

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix Spike - EPA Sample No.: A4721 Level:(LOW/MED) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC.
1,1-Dichloroethene	50.813	0.000	63.995	126		59-172
Trichloroethene	50.813	0.000	44.581	88		62-137
Benzene	50.813	0.000	54.649	108		66-142
Toluene	50.813	1.729	58.610	112		59-139
Chlorobenzene	50.813	0.000	56.771	112		60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.813	64.778	127		1		22	59-172
Trichloroethene	50.813	45.819	90		3		24	62-137
Benzene	50.813	56.263	111		3		21	66-142
Toluene	50.813	59.542	114		2		21	59-139
Chlorobenzene	50.813	56.813	112		0		21	60-133

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

Comments: _____

_____

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID: >D1548 Lab Sample ID: VBLK1

Date Analyzed 10/10/90 Time Analyzed: 1425

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: GC/MS D

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	A4720	CA4720V	>D1549	1606
02	A4721	CA4721V	>D1550	1653
03	A4721MS	CA4721VS	>D1551	1737
04	A4721MSD	CA4721VR	>D1552	1822
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Comments: _____

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: ETC Corp. Contract: _____

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

Lab File ID: >D1542 BFB Injection Date: 10/10/90

Instrument ID: GC/MS_D___ BFB Injection Time: 1003

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) Pack

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	53.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.4
175	5.0 - 9.0% of mass 174	7.4 (8.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	86.7 (98.1)1
177	5.0 - 9.0% of mass 176	7.1 (8.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	_____	QC70367VS	>D1543	10/10/90	1038
02	_____	QC70367VS	>D1544	10/10/90	1125
03	_____	QC70367VS	>D1545	10/10/90	1210
04	_____	QC70367VS	>D1546	10/10/90	1256
05	_____	QC70367VS	>D1547	10/10/90	1340
06	_____	QC70367V	>D1548	10/10/90	1425
07	_____	CA4720V	>D1549	10/10/90	1606
08	_____	CA4721V	>D1550	10/10/90	1653
09	_____	CA4721VS	>D1551	10/10/90	1737
10	_____	CA4721VR	>D1552	10/10/90	1822
11	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	11

SAMPLE DATA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720V

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1549

Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	8	
67-64-1	Acetone	15	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ETC Corp. Contract: _____

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

Matrix: (soil/water) Soil Lab Sample ID: CA4720V

Sample wt/vol: 4.9 (g/mL) g Lab File ID: >D1549

Level: (low/med) low Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) Pack Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ~~ug/Kg~~) ug/Kg	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
CA4720

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720V

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1549

Level: (low/med) LOW Date Received: 10/11/90

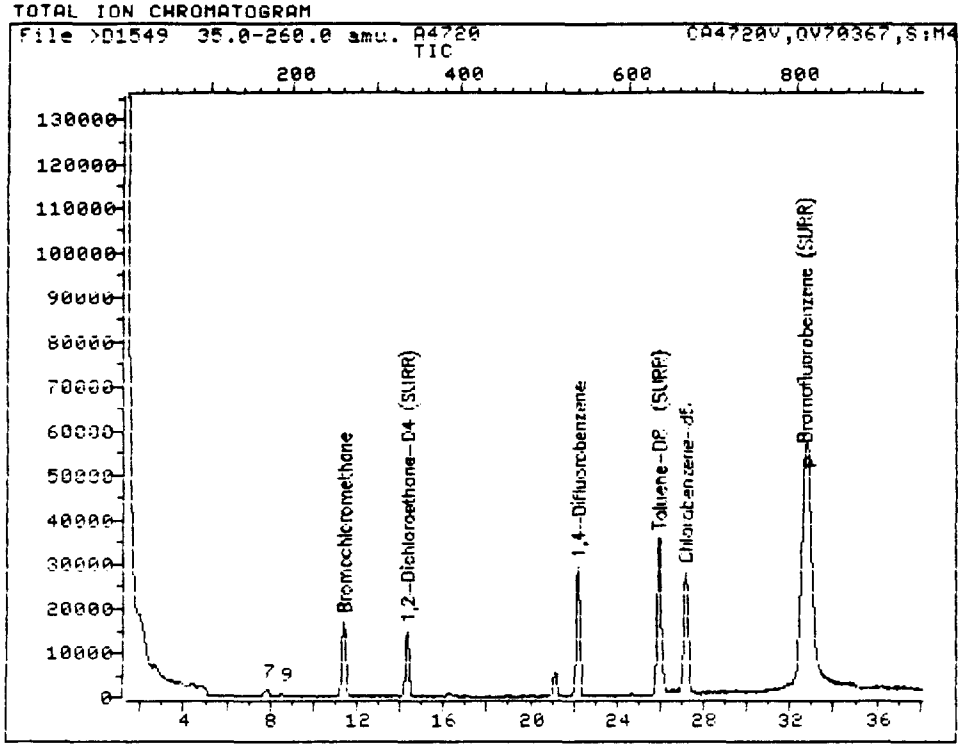
% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Unknown Alkane	21.15	9	J
02.	Carbon dioxide	2.62	9	

TOTAL ION CHROMATOGRAM



Data File: >D1549::UO Quant Output File: ^D1549::AQ
Name: A4720
Misc: CA4720V,QV70367,S:M4,$,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

Operator ID: KB6656
Quant Time: 901010 16:45
Injected at: 901010 16:06

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 16:45
Output File: ^D1549::AQ Injected at: 901010 16:06
Data File: >D1549::U0 Dilution Factor: 1.00000
Name: A4720 4.91 KB 10/11/90
Misc: CA4720V,QV70367,S:M4,$,,

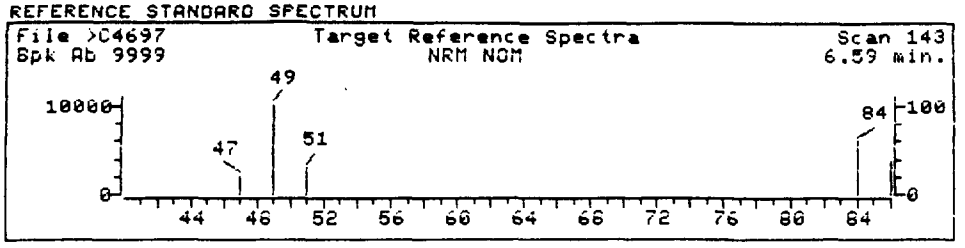
ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.39	260	29547	250.00	NG	96
7)	Methylene chloride	7.82	168	6008	38.17	NG	97
9)	Acetone	8.59	188	5535	74.74	NG	90
19)	1,2-Dichloroethane-D4 (SURR)	14.33	336	77026	258.76	NG	99
22)	*1,4-Difluorobenzene	22.20	539	131933	250.00	NG	99
38)	*Chlorobenzene-d5	27.17	667	110230	250.00	NG	82
44)	Toluene-D8 (SURR)	25.92	635	154969	237.08	NG	96
48)	p-Bromofluorobenzene (SURR)	32.64	808	109615	259.56	NG	91

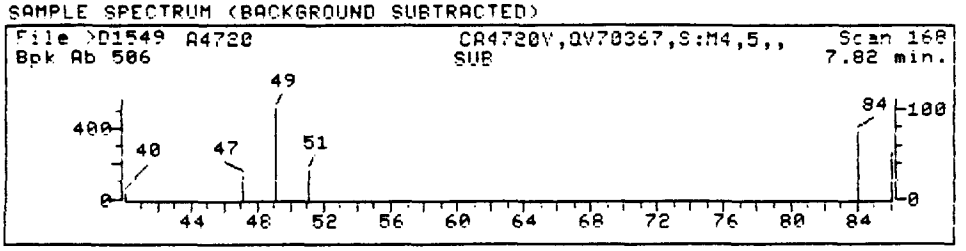
* Compound is ISTD

KB 10/11/90

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



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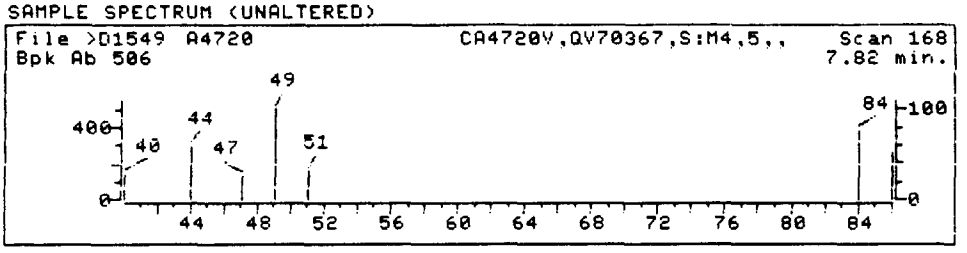

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Name: A4720
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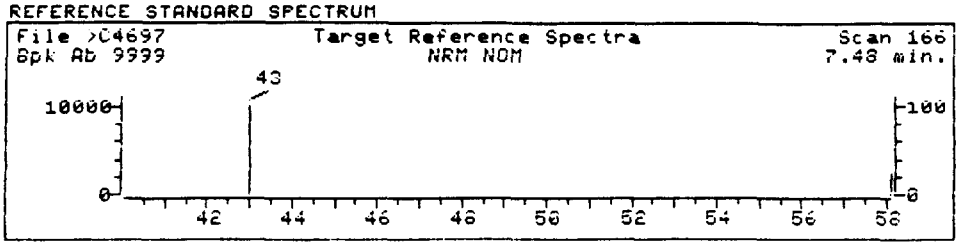
Quant Time: 901010 16:45
Injected at: 901010 16:06

Quant Output File: ^D1549::AQ
Quant ID File: ID0270::US
Last Calibration: 901010 14:36

A91 KB 14:190

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 168
Retention Time: 7.82 min.
Quant Ion: 84.0
Area: 6008
Concentration: 38.17 NG
q-value: 97

REFERENCE STANDARD SPECTRUM



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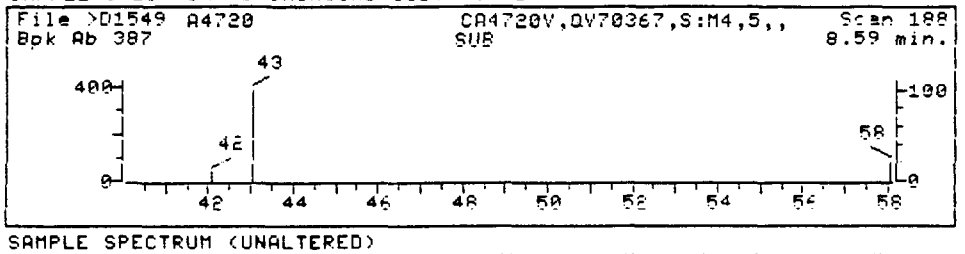
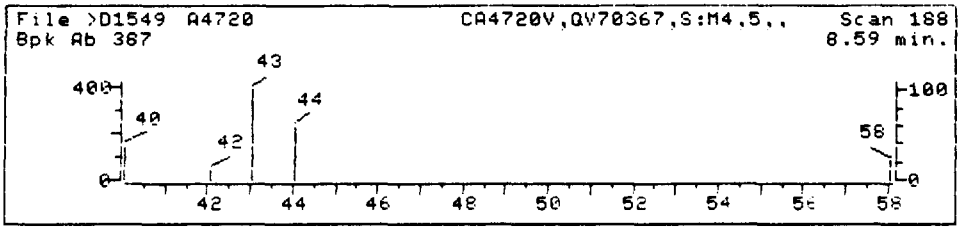


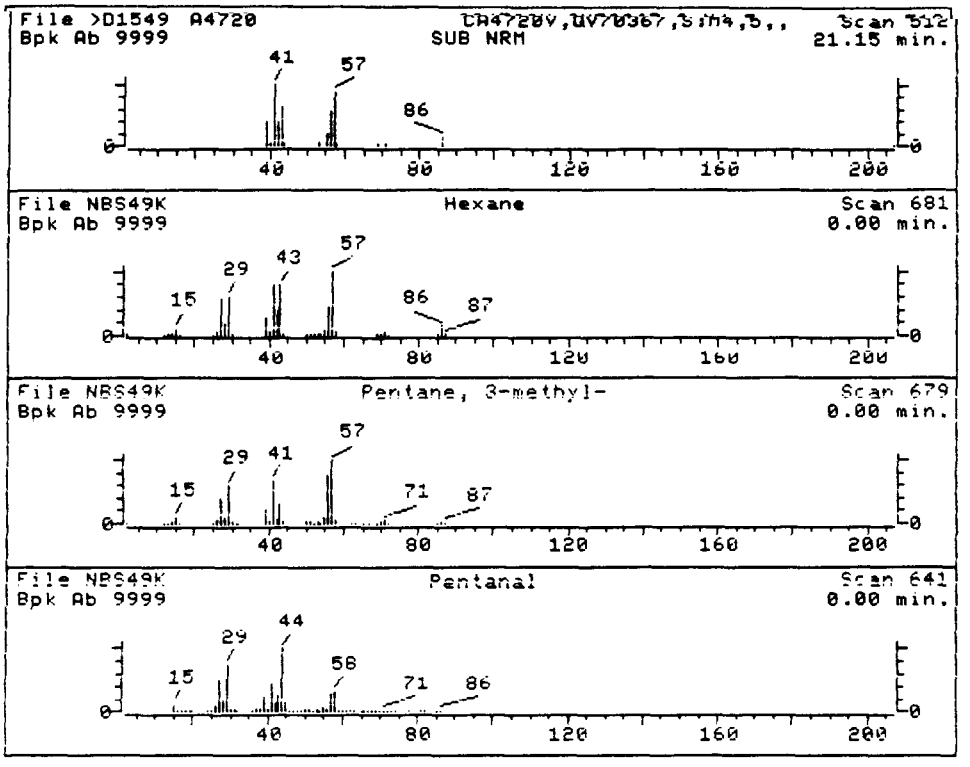
SAMPLE SPECTRUM (UNALTERED)



Data File: >D1549::UU
Name: A4720
Misc: CA4720V,QV70367,S:M4,5,,
Quant Time: 901010 16:45
Injected at: 901010 16:06

Quant Output File: ^D1549::AQ
KB 10/11/90
Quant ID File: ID0270::US
Last Calibration: 901010 14:36

Compound No: 9
Compound Name: Acetone
Scan Number: 188
Retention Time: 8.59 min.
Quant Ion: 43.0
Area: 5535
Concentration: 24.74 NG
q-value: 90



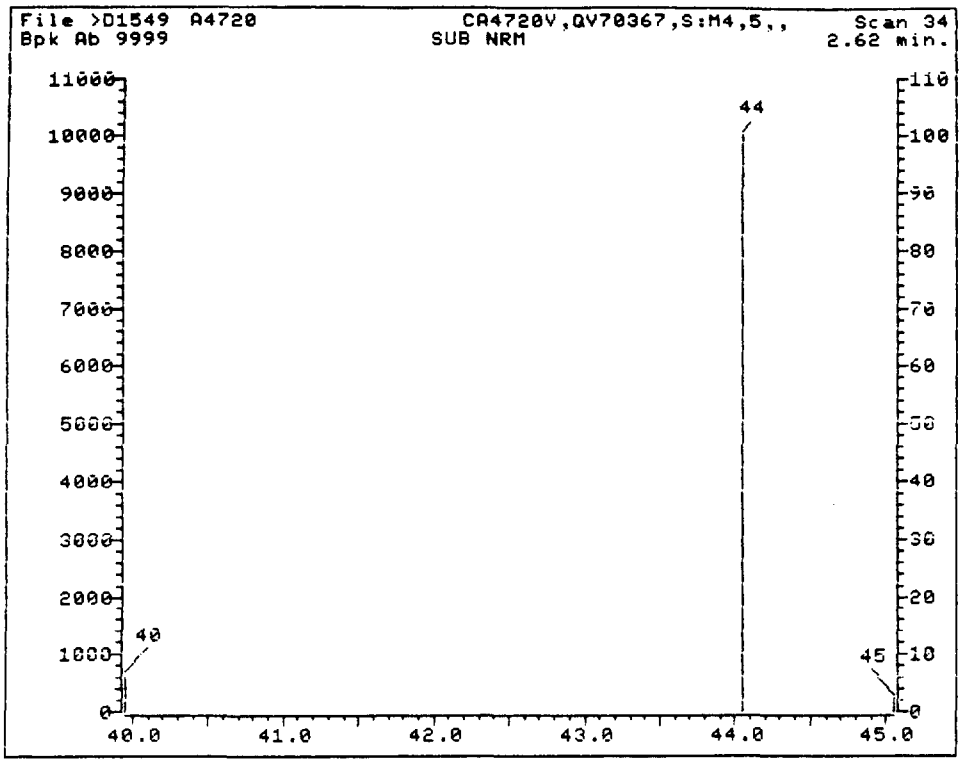
Data File: >D1549::UU
Name: A4720
Misc Data: CA4720V,QV70367,S:M4,9,,
RT (min): 21.15
Scan: 512
Area: 62840 Rank: 4
Semi-quantitative Conc (uncorrected): 45.75 NG
Semi-quantitative Conc (corrected): 9.15 ug/kg
Calculated using Istd: 1,4-Difluorobenzene @ 22.20 minutes

4.92 KB 10/1/90

1.	Hexane	86 C6H14
2.	Pentane, 3-methyl-	86 C6H14
3.	Pentanal	86 C5H10O

Sample file: >D1549 Spectrum #: 512
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	71*	110543	6971	NBS49K	39	57	0	0	28	14	38	38
2.	31*	96140	1025	NBS49K	25	59	1	0	72	34	12	14
3.	25*	110623	1339	NBS49K	22	76	3	0	226	49	7	12



Data File: >D1549::U0
Name: A4720
Misc Data: CA4720V,QV70367,S:M4,5,,
KB 10/16/90
RT (min): 2.62
Scan: 34
Area: 38709 Rank: 5
Semi-quantitative Conc (uncorrected): 46.57 NG
Semi-quantitative Conc (corrected): 9.31 ug/kg
Calculated using Istd: Bromochloromethane @ 11.39 minutes

No PBM hits for this scan.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721V

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1550

Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	8	
67-64-1	Acetone	19	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: E.T.C Corp. Contract: _____

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

Matrix: (soil/water) Soil Lab Sample ID: CA4721V

Sample wt/vol: 4.9 (g/mL) G Lab File ID: 7D1550

Level: (low/med) low Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) Pack Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

A4721

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721U

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1550

Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

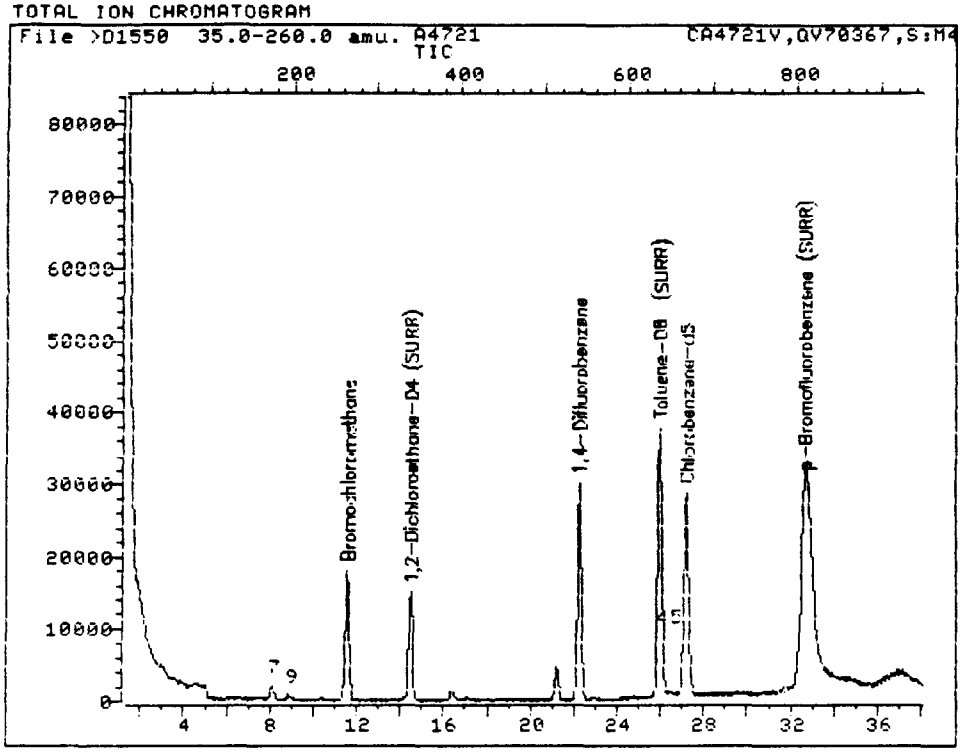
Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Unknown Alkane	21.24	7	J

TOTAL ION CHROMATOGRAM



Data File: >D1550::UU
Name: A4721
Misc: CA4721V,QV70367,S:M4,5,,

Quant Output File: ^D1550::AQ

4.92 KB 10/11/90

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

Operator ID: KB6656
Quant Time: 901010 17:32
Injected at: 901010 16:53

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 17:32
Output File: ^D1550::AQ Injected at: 901010 16:53
Data File: >D1550::U0 Dilution Factor: 1.00000
Name: A4721
Misc: CA4721U,QU70367,S:M4,$,, $1.92 KB 10/11/90

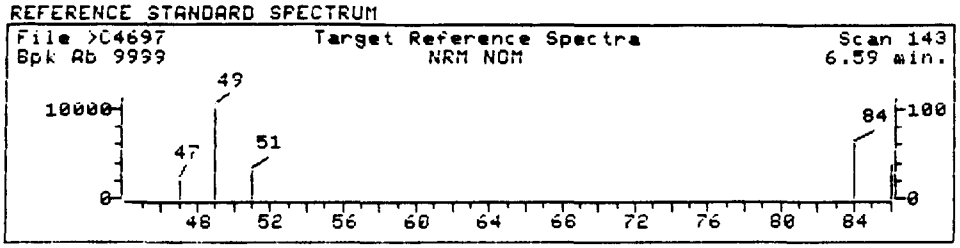
ID File: ID0270::US
Title: PP/V0A, IFB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 14:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.59	265	30644	250.00	NG	94
7)	Methylene chloride	8.10	175	6577	40.29	NG	97
9)	Acetone	8.91	196	7250	94.40	NG	94
19)	1,2-Dichloroethane-D4 (SURR)	14.49	340	78742	255.06	NG	94
22)	*1,4-Difluorobenzene	22.25	540	137869	250.00	NG	98
38)	*Chlorobenzene-d5	27.22	668	116921	250.00	NG	82
44)	Toluene-D8 (SURR)	25.98	636	160399	232.14	NG	94
45)	Toluene	26.13	640	2708	8.51	NG	97
48)	p-Bromofluorobenzene (SURR)	32.65	808	117223	262.59	NG	91

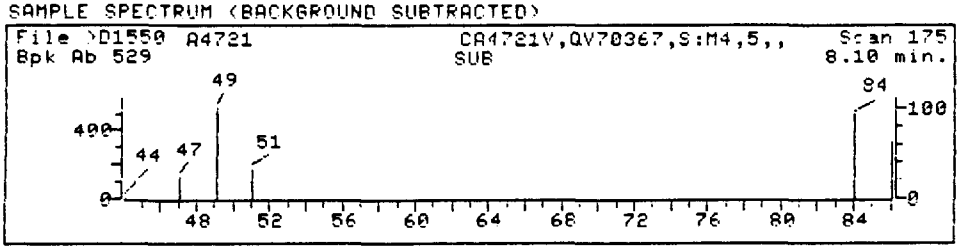
* Compound is ISTD

KB 10/11/90

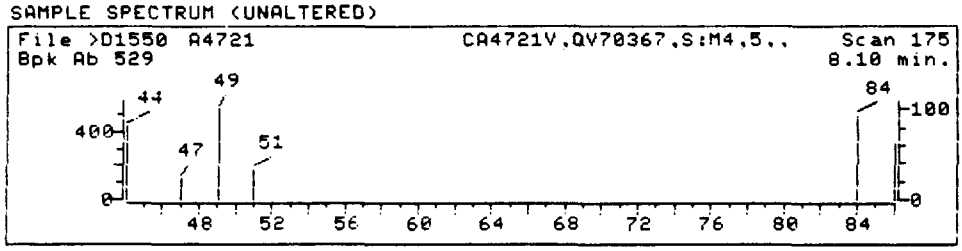
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



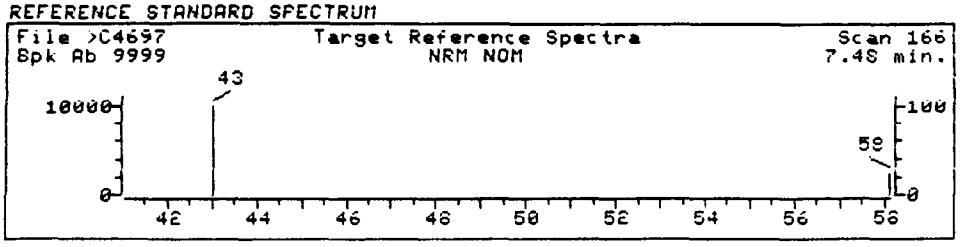
SAMPLE SPECTRUM (UNALTERED)



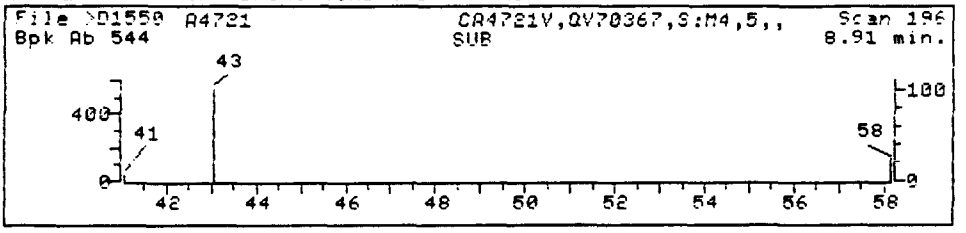
Data File: >D1550::U0 Quant Output File: ^D1550::AQ
Name: A4721
Misc: CA4721V,QV70367,S:M4,5,,
Quant Time: 901010 17:32 Quant ID File: ID0270::US
Injected at: 901010 16:53 Last Calibration: 901010 14:36

Compound No: 7
Compound Name: Methylene chloride
Scan Number: 175
Retention Time: 8.10 min.
Quant Ion: 84.0
Area: 6577
Concentration: 40.29 NG
q-value: 97

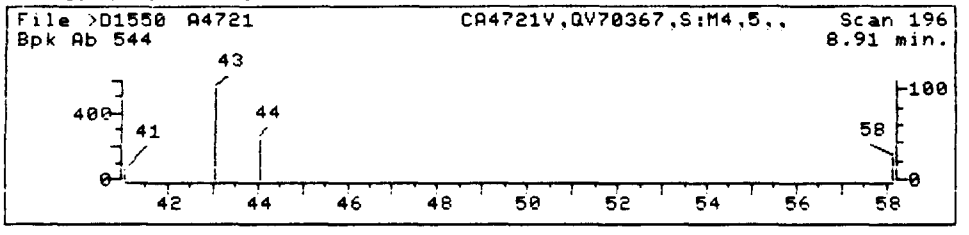
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



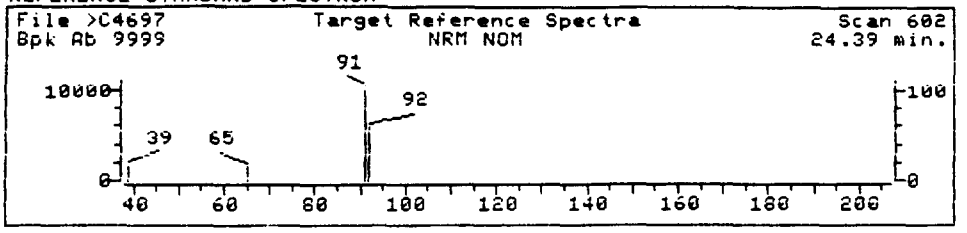
SAMPLE SPECTRUM (UNALTERED)



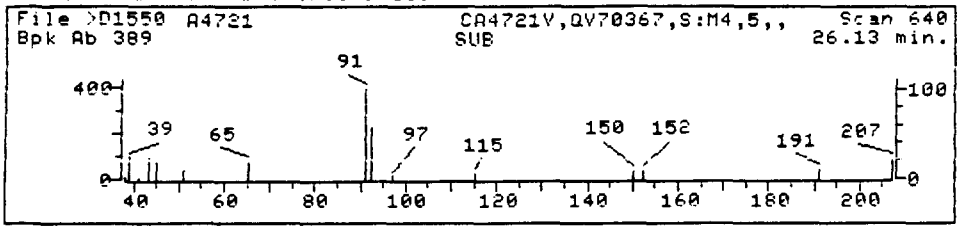
Data File: >D1550::U0 Quant Output File: ^D1550::AQ
Name: A4721
Misc: CA4721V,QV70367,S:M4,5,, A92 KB 10/11/90
Quant Time: 901010 17:32 Quant ID File: ID0270::US
Injected at: 901010 16:53 Last Calibration: 901010 14:36

Compound No: 9
Compound Name: Acetone
Scan Number: 196
Retention Time: 8.91 min.
Quant Ion: 43.0
Area: 7250
Concentration: 94.40 NG
q-value: 94

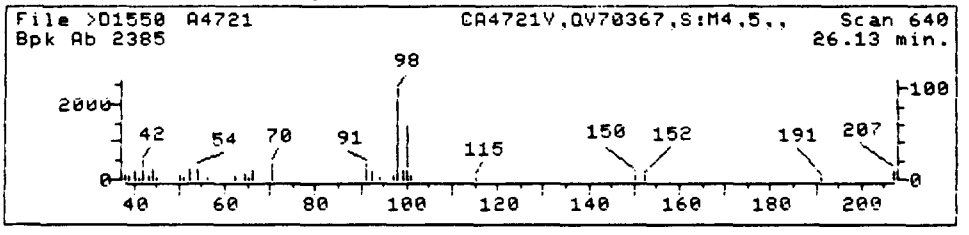
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



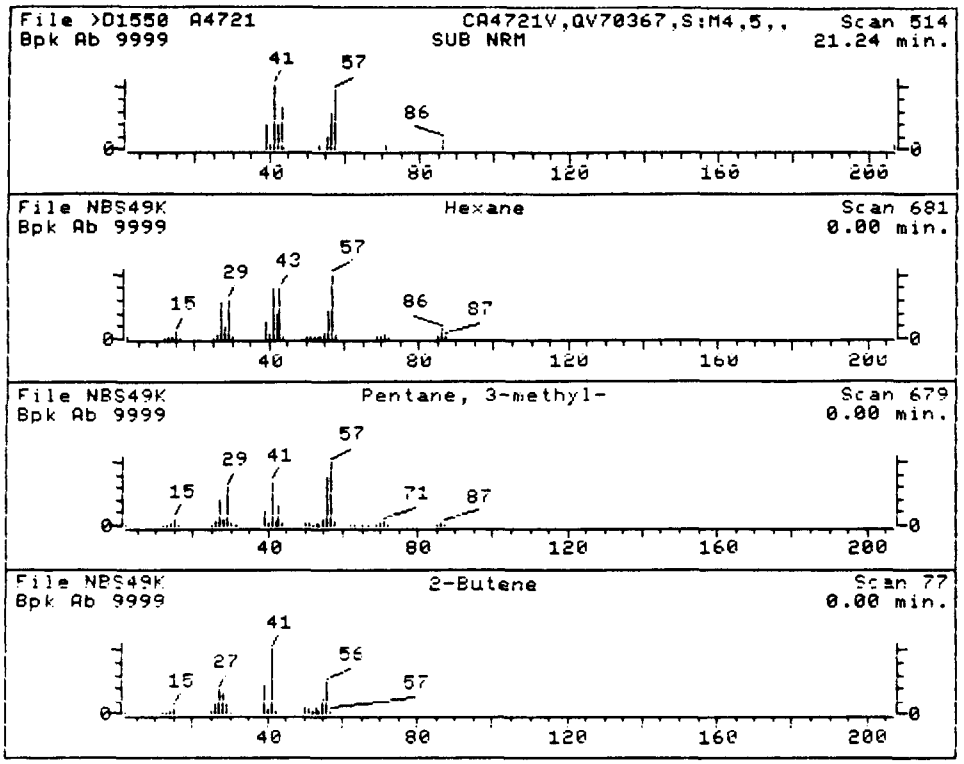
Data File: >D1550::UU
Name: A4721
Misc: CA4721V,QV70367,S:M4,5,,
Quant Time: 901010 17:32
Injected at: 901010 16:53

Quant Output File: ^D1550::AU

4.92 KB 10/4/90

Quant ID File: ID0270::US
Last Calibration: 901010 14:36

Compound No: 45
Compound Name: Toluene
Scan Number: 640
Retention Time: 26.13 min.
Quant Ion: 92.0
Area: 2708
Concentration: 8.51 NG
q-value: 97



Data File: >D1550::U0
Name: A4721 4.92
Misc Data: CA4721U,QV70367,S:M4,5,,
RT (min): 21.24
Scan: 514
Area: 52898 Rank: 4
Semi-quantitative Conc (uncorrected): 36.89 NG
Semi-quantitative Conc (corrected): 7.37 ug/kg
Calculated using Istd: 1,4-Difluorobenzene @ 22.25 minutes

1.	Hexane	86 C6H14
2.	Pentane, 3-methyl-	86 C6H14
3.	2-Butene	56 C4H8

Sample file: >D155U Spectrum #: 514
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	58*	110543	6971	NBS49K	43	53	1	0	83	18	25	29
2.	27*	96140	1025	NBS49K	20	64	2	0	74	39	10	13
3.	20*	107017	995	NBS49K	32	49	2	0	84	55	5	16

STANDARDS DATA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETC Corp. | Laboratory Contract:

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

Instrument ID:GC/MS D Calibration Date(s) 10/10/90 10/10/90

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>D1547 RRF50 =>D1546
RRF100=>D1543 RRF150=>D1545 RRF200=>D1544

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	.420	.371	.434	.365	.373	.393	8.0#
Bromomethane	.455	.391	.316	.317	.297	.355	18.6
Vinyl Chloride *	.888	.860	.973	.782	.755	.852	10.2*
Chloroethane	.650	.604	.664	.604	.609	.626	4.5
Methylene Chloride	1.443	1.364	1.320	1.291	1.241	1.332	5.8
Acetone	.631	.864	.523	.586	.528	.627	22.4
Carbon Disulfide	2.519	2.488	2.614	2.474	2.477	2.514	2.3
1,1-Dichloroethene *	1.134	1.132	1.200	1.135	1.144	1.149	2.5*
1,1-Dichloroethane #	2.316	2.201	2.053	2.130	2.089	2.158	4.8#
1,2-Dichlorethene (total)	1.161	1.131	1.182	1.134	1.148	1.151	1.8
Chloroform *	3.577	3.389	3.131	3.210	3.228	3.307	5.4*
1,2-Dichloroethane	2.840	2.662	2.269	2.543	2.527	2.568	8.1
2-Butanone	.038	.040	.037	.040	.037	.039	4.3
1,1,1-Trichloroethane	.775	.723	.806	.721	.712	.747	5.5
Carbon Tetrachloride	.668	.647	.740	.664	.665	.677	5.3
Vinyl Acetate	.466	.440	.459	.462	.451	.456	2.2
Bromodichloromethane	.607	.564	.577	.583	.576	.581	2.7
1,2-Dichloropropane *	.260	.251	.251	.247	.248	.251	2.0*
cis-1,3-Dichloropropene	.336	.347	.350	.358	.363	.351	3.0
Trichloroethene	.428	.433	.469	.438	.429	.439	3.9
Dibromochloromethane	.427	.441	.433	.458	.447	.441	2.8
1,1,2-Trichloroethane	.281	.271	.254	.263	.255	.265	4.4
Benzene	.907	.855	.871	.833	.822	.858	3.9
trans-1,3-Dichloropropene	.410	.422	.404	.426	.421	.417	2.2
Bromoform #	.332	.368	.370	.400	.382	.371	6.7#
4-Methyl-2-Pentanone	.593	.690	.523	.563	.480	.570	14.0
2-Hexanone	.511	.545	.431	.463	.380	.466	13.9
Tetrachloroethene	.482	.458	.469	.458	.455	.464	2.4
1,1,2,2-Tetrachloroethane #	.573	.544	.531	.564	.527	.548	3.7#
Toluene *	.723	.678	.675	.671	.668	.683	3.3*
Chlorobenzene #	1.031	.972	.965	.963	.957	.978	3.1#
Ethylbenzene *	.532	.512	.497	.495	.491	.505	3.3*
Styrene	1.207	1.166	1.067	1.089	1.063	1.118	5.8
Xylene (total)	.711	.678	.650	.641	.636	.663	4.7
Toluene-d8	1.462	1.480	1.490	1.487	1.493	1.482	.8
Bromofluorobenzene	.983	.986	.963	.948	.908	.958	3.3
1,2-Dichloroethane-d4	2.515	2.549	2.269	2.583	2.677	2.519	6.0

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ETC Corp. Contract: _____

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

Instrument ID: D Calibration Date(s): 10/10/90 10/10/90

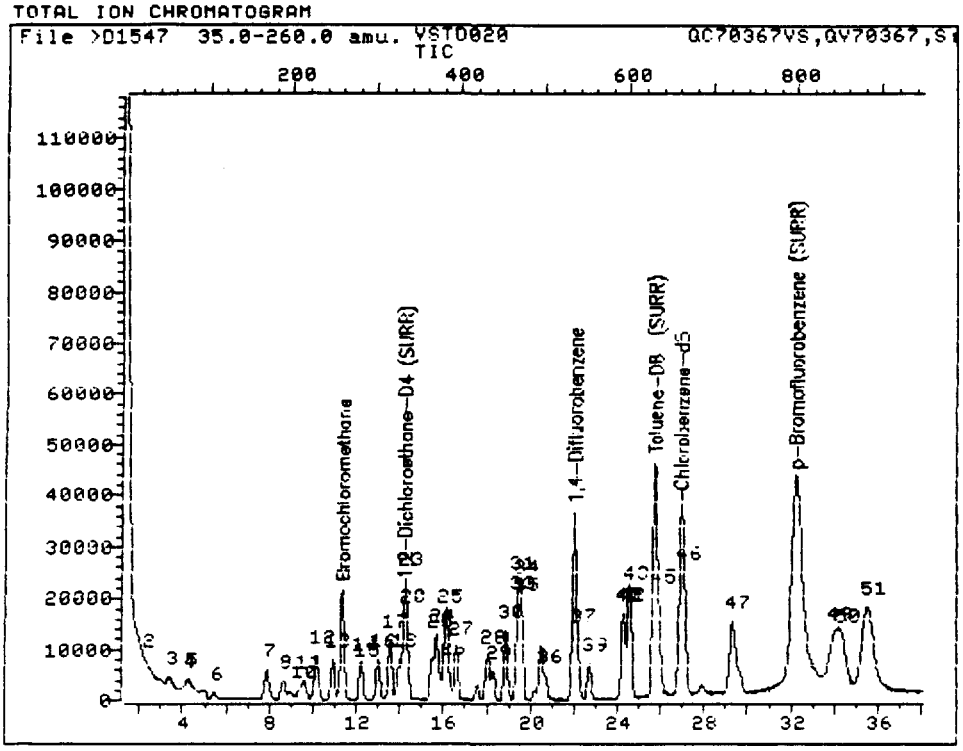
Matrix: (soil/water) SOIL Level: (low/med) LOW Column: (pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = >D1547 RRF50 = >D1546
RRF100= >D1543 RRF150= >D1545 RRF200= >D1544

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Tetrahydrofuran	.32648	.76101	.28611	.36276	.28810	.40489	49.77

TOTAL ION CHROMATOGRAM



Data File: >D1547::U0 Quant Output File: ^D1547::AQ
Name: VSTD020
Misc: QC70367VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

Operator ID: KB6656
Quant Time: 901010 14:19
Injected at: 901010 13:40

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 14:19
Output File: ^D1547::AQ Injected at: 901010 13:40
Data File: >D1547::U0 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.35	259	39060	250.00	NG	96
2)	Methyl chloride	2.28	25	6556	82.64	NG	98
3)	Methyl bromide	3.36	53	7103	84.59	NG	98
4)	Dichlorodifluoromethane	4.21	75	15731	116.54	NG	96
5)	Vinyl chloride	4.25	76	13867	91.91	NG	98
6)	Chloroethane	5.42	106	10148	89.59	NG	97
7)	Methylene chloride	7.90	170	22548	87.31	NG	97
8)	Acrolein	8.63	189	17955	1157.48	NG	90
9)	Acetone	8.63	189	9860	134.30	NG	99
10)	Acrylonitrile	9.41	209	8436	190.01	NG	96
11)	Carbon disulfide	9.60	214	39360	51.16	NG	98
12)	Trichlorofluoromethane	10.18	229	52697	93.93	NG	94
13)	1,1-Dichloroethylene	10.92	248	17723	81.80	NG	94
14)	1,1-Dichloroethane	12.20	281	36191	84.23	NG	97
15)	Tetrahydrofuran	12.28	283	5101	4942.96	NG	100
16)	1,2-Trans-dichloroethylene	13.02	302	18137	82.84	NG	98
17)	Chloroform	13.56	316	55884	86.06	NG	97
18)	Freon TF	13.98	327	16696	81.99	NG	90
19)	1,2-Dichloroethane-D4 (SURR)	14.22	333	98255	253.93	NG	97
20)	1,2-Dichloroethane	14.33	336	44365	92.97	NG	95
22)	*1,4-Difluorobenzene	22.01	534	165787	250.00	NG	99
23)	Methyl ethyl ketone	14.26	334	2532	161.80	NG	84
24)	1,1,1-Trichloroethane	15.69	371	51416	95.08	NG	95
25)	Carbon tetrachloride	15.65	370	6133	12.31	NG	99
25)	Carbon tetrachloride	16.08	381	44307	88.94	NG	97
26)	Vinyl acetate	16.27	386	30884	110.57	NG	99
27)	Dichlorobromomethane	16.58	394	40253	96.15	NG	98
28)	1,2-Dichloropropane	18.02	431	17216	88.55	NG	92
29)	cis-1,3-Dichloropropylene	18.29	438	22303	85.36	NG	94
30)	Trichloroethylene	18.87	453	28387	94.28	NG	97
31)	Chlorodibromomethane	19.45	468	28341	94.78	NG	97
32)	bis(Chloromethyl)ether	19.45	468	10418	97.57	NG	100
33)	Benzene	19.41	467	60157	94.77	NG	94
34)	1,1,2-Trichloroethane	19.57	471	18651	105.61	NG	91
35)	trans-1,3-Dichloropropylene	19.61	472	27182	91.44	NG	92
36)	2-Chloroethylvinyl ether	20.69	500	9385	110.62	NG	100
37)	Bromoform	22.17	538	22047	108.33	NG	98
38)	*Chlorobenzene-d5	26.95	661	135138	250.00	NG	84
39)	Methyl-iso-butyl ketone	22.71	552	32061	164.31	NG	91
40)	1,2,3-Trichloropropane	24.26	592	35611	1378.88	NG	98
41)	2-Hexanone	24.26	592	27603	171.77	NG	88
42)	1,1,2,2-Tetrachloroethane	24.49	598	30969	125.47	NG	98
43)	Tetrachloroethylene	24.61	601	26053	89.60	NG	98

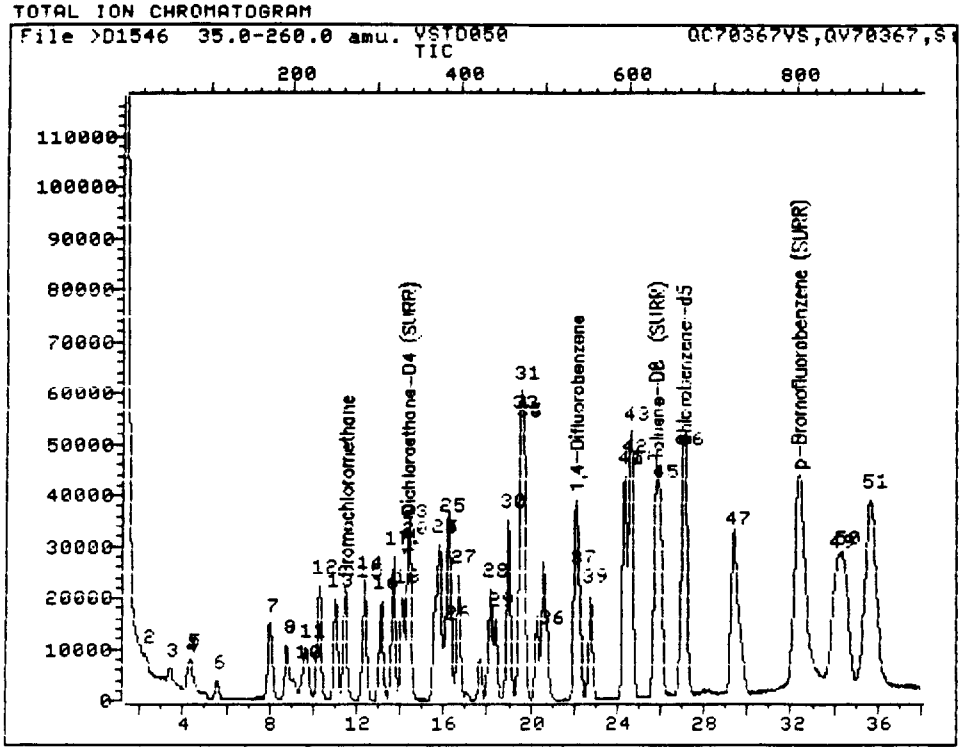
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 14:19
Output File: ^D1547::AQ Injected at: 901010 13:40
Data File: >D1547::U0 Dilution Factor: 1.00000
Name: VSTD020
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
44)	Toluene-D8 (SURR)	25.74	630	197617	251.66	NG	97
45)	Toluene	25.93	635	39063	91.77	NG	98
46)	Chlorobenzene	27.10	665	55742	90.98	NG	97
47)	Ethylbenzene	29.31	722	28753	91.67	NG	81
48)	p-Bromofluorobenzene (SURR)	32.22	797	132855	257.89	NG	89
49)	Styrene	34.01	843	65227	91.46	NG	91
50)	m-Xylene	34.36	852	37120	91.31	NG	94
51)	o+p-Xylenes	35.56	883	76841	183.45	NG	90

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1546::U0 Quant Output File: ^D1546::AW
Name: VSTD050
Misc: QC70367VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

Operator ID: KB6656
Quant Time: 901010 13:35
Injected at: 901010 12:56

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 13:35
Output File: ^D1546::AQ Injected at: 901010 12:56
Data File: >D1546::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/V0A, 1FB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.46	262	39299	250.00	NG	95
2)	Methyl chloride	2.28	25	14596	182.87	NG	98
3)	Methyl bromide	3.40	54	15355	181.74	NG	93
4)	Dichlorodifluoromethane	4.25	76	38033	280.04	NG	96
5)	Vinyl chloride	4.33	78	33805	222.69	NG	98
6)	Chloroethane	5.57	110	23741	208.33	NG	94
7)	Methylene chloride	7.98	172	53614	206.34	NG	99
8)	Acrolein	8.79	193	58562	3752.29	NG	88
9)	Acetone	8.79	193	33958	459.71	NG	96
10)	Acrylonitrile	9.53	212	22759	509.50	NG	94
11)	Carbon disulfide	9.72	217	97771	126.31	NG	98
12)	Trichlorofluoromethane	10.30	232	127072	225.12	NG	96
13)	1,1-Dichloroethylene	11.04	251	44472	204.00	NG	95
14)	1,1-Dichloroethane	12.36	285	86494	200.08	NG	95
15)	Tetrahydrofuran	12.40	286	29907	28804.19	NG	100
16)	1,2-Trans-dichloroethylene	13.13	305	44458	201.83	NG	98
17)	Chloroform	13.67	319	133199	203.87	NG	97
18)	Freon TF	14.10	330	41284	201.50	NG	87
19)	1,2-Dichloroethane-D4 (SURR)	14.33	336	100166	257.29	NG	94
20)	1,2-Dichloroethane	14.45	339	104612	217.88	NG	96
22)	*1,4-Difluorobenzene	22.09	536	170589	250.00	NG	98
23)	Methyl ethyl ketone	14.41	338	6875	426.96	NG	90
24)	1,1,1-Trichloroethane	15.81	374	123273	221.55	NG	97
25)	Carbon tetrachloride	15.81	374	14218	27.74	NG	99
25)	Carbon tetrachloride	16.20	384	110422	215.41	NG	97
26)	Vinyl acetate	16.39	389	75126	261.39	NG	98
27)	Dichlorobromomethane	16.70	397	96182	223.27	NG	99
28)	1,2-Dichloropropane	18.13	434	42825	214.08	NG	99
29)	cis-1,3-Dichloropropylene	18.41	441	59180	220.12	NG	99
30)	Trichloroethylene	18.99	456	73935	238.64	NG	97
31)	Chlorodibromomethane	19.57	471	75304	244.74	NG	99
32)	bis(Chloromethyl)ether	19.57	471	25288	230.17	NG	100
33)	Benzene	19.53	470	145798	223.22	NG	96
34)	1,1,2-Trichloroethane	19.69	474	46314	254.88	NG	89
35)	trans-1,3-Dichloropropylene	19.69	474	71936	235.17	NG	92
36)	2-Chloroethylvinyl ether	20.31	503	32669	374.22	NG	100
37)	Bromoform	22.25	540	62846	300.12	NG	97
38)	*Chlorobenzene-d5	27.03	663	134567	250.00	NG	83
39)	Methyl-iso-butyl ketone	22.79	554	92875	478.00	NG	95
40)	1,2,3-Trichloropropane	24.34	594	86960	3381.43	NG	97
41)	2-Hexanone	24.34	594	73278	457.93	NG	92
42)	1,1,2,2-Tetrachloroethane	24.57	600	73249	298.02	NG	98
43)	Tetrachloroethylene	24.65	602	61668	212.98	NG	98

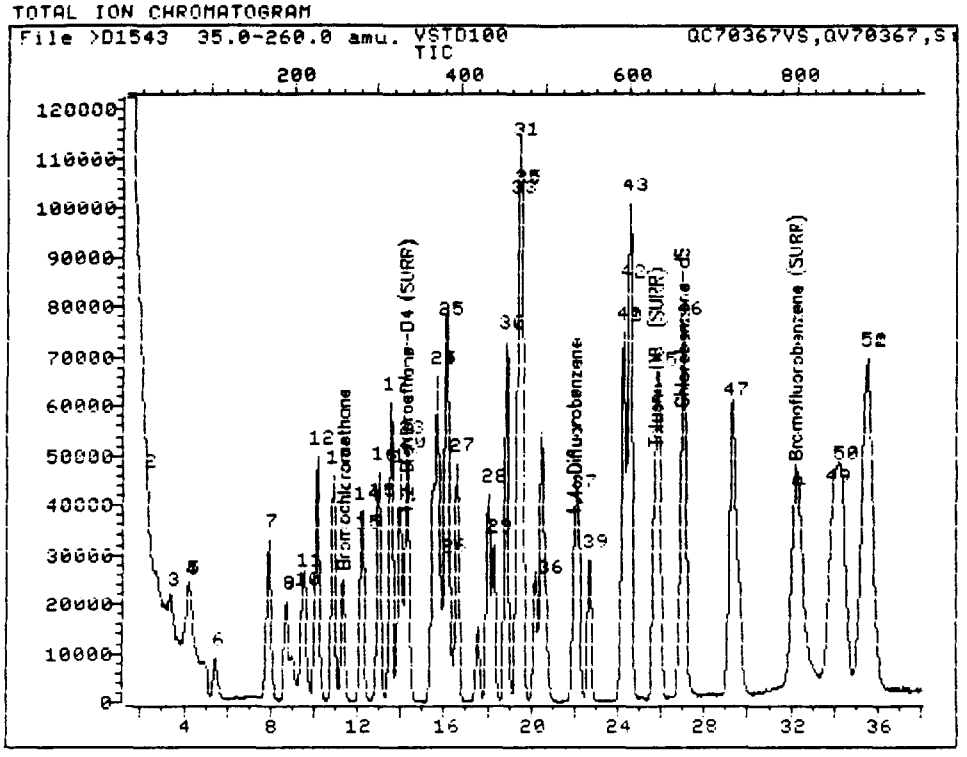
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 13:35
Output File: ^D1546::AQ Injected at: 901010 12:56
Data File: >D1546::U0 Dilution Factor: 1.00000
Name: VSTD050
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
44)	Toluene-D8 (SURR)	25.78	631	199099	254.63	NG	95
45)	Toluene	25.97	636	91211	215.20	NG	97
46)	Chlorobenzene	27.14	666	130843	214.46	NG	98
47)	Ethylbenzene	29.35	723	68936	220.72	NG	81
48)	p-Bromofluorobenzene (SURR)	32.34	800	132616	258.52	NG	88
49)	Styrene	34.13	846	156918	220.95	NG	93
50)	m-Xylene	34.44	854	87972	217.31	NG	96
51)	o+p-Xylenes	35.68	886	182567	437.71	NG	91

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1543::UU Quant Output File: ^D1543::AQ
Name: VSTD100
Misc: QC70367VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

Operator ID: KB6656
Quant Time: 901010 11:29
Injected at: 901010 10:38

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 11:29
Output File: ^D1543::AQ Injected at: 901010 10:38
Data File: >D1543::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/V0A, IFB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.34	259	46040	250.00	NG	96
2)	Methyl chloride	2.27	25	39928	427.01	NG	96
3)	Methyl bromide	3.36	53	29068	293.68	NG	96
4)	Dichlorodifluoromethane	4.17	74	83321	523.67	NG	97
5)	Vinyl chloride	4.25	76	89601	503.82	NG	97
6)	Chloroethane	5.49	108	61104	457.68	NG	96
7)	Methylene chloride	7.89	170	121567	399.35	NG	99
8)	Acrolein	8.71	191	133520	7302.52	NG	94
9)	Acetone	8.71	191	48142	556.30	NG	94
10)	Acrylonitrile	9.44	210	51111	976.68	NG	92
11)	Carbon disulfide	9.56	213	240695	265.42	NG	99
12)	Trichlorofluoromethane	10.14	228	293403	443.68	NG	97
13)	1,1-Dichloroethylene	10.88	247	110523	432.75	NG	97
14)	1,1-Dichloroethane	12.20	281	189029	373.25	NG	97
15)	Tetrahydrofuran	12.27	283	26345	21658.44	NG	100
15)	Tetrahydrofuran	12.93	300	11271	9265.98	NG	100
16)	1,2-Trans-dichloroethylene	12.97	301	108866	421.87	NG	96
17)	Chloroform	13.55	316	288269	376.61	NG	98
18)	Freon TF	13.98	327	98898	412.03	NG	92
19)	1,2-Dichloroethane-D4 (SURR)	14.21	333	104467	229.05	NG	97
20)	1,2-Dichloroethane	14.33	336	208914	371.40	NG	98
22)	*1,4-Difluorobenzene	21.97	533	167204	250.00	NG	97
23)	Methyl ethyl ketone	14.29	335	12485	791.06	NG	91
24)	1,1,1-Trichloroethane	15.69	371	269452	494.07	NG	96
25)	Carbon tetrachloride	15.69	371	30848	61.40	NG	97
25)	Carbon tetrachloride	16.08	381	247463	492.53	NG	98
26)	Vinyl acetate	16.27	386	153415	544.59	NG	98
27)	Dichlorobromomethane	16.58	394	193029	457.16	NG	98
28)	1,2-Dichloropropane	18.02	431	83898	427.89	NG	97
29)	cis-1,3-Dichloropropylene	18.29	438	116982	443.91	NG	99
30)	Trichloroethylene	18.87	453	156831	516.46	NG	95
31)	Chlorodibromomethane	19.45	468	144698	479.79	NG	98
32)	bis(Chloromethyl)ether	19.45	468	49075	455.71	NG	100
33)	Benzene	19.41	467	291365	455.12	NG	96
34)	1,1,2-Trichloroethane	19.57	471	84818	476.22	NG	89
35)	trans-1,3-Dichloropropylene	19.57	471	134994	450.25	NG	92
36)	2-Chloroethylvinyl ether	20.69	500	58703	686.05	NG	100
37)	Bromoform	22.17	538	123760	602.97	NG	98
38)	*Chlorobenzene-d5	26.95	661	129201	250.00	NG	83
39)	Methyl-iso-butyl ketone	22.71	552	135045	723.90	NG	96
40)	1,2,3-Trichloropropane	24.26	592	159088	6443.04	NG	98
41)	2-Hexanone	24.26	592	111489	725.66	NG	93
42)	1,1,2,2-Tetrachloroethane	24.49	598	137301	581.82	NG	98

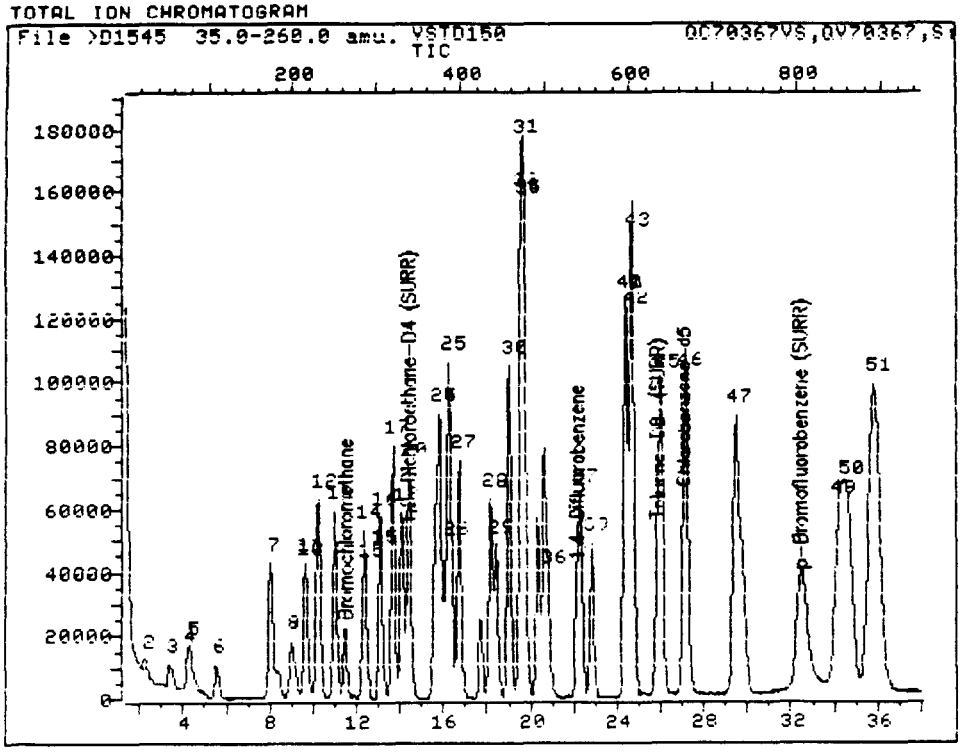
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 11:29
Output File: ^D1543::AQ Injected at: 901010 10:38
Data File: >D1543::U0 Dilution Factor: 1.00000
Name: VSTD100
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/V0A, IFB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Tetrachloroethylene	24.57	600	121147	435.78	NG	99
44)	Toluene-D8 (SURR)	25.73	630	192601	256.41	NG	95
45)	Toluene	25.93	635	174456	428.69	NG	99
46)	Chlorobenzene	27.06	664	249439	425.83	NG	96
47)	Ethylbenzene	29.27	721	128487	428.47	NG	80
48)	p-Bromofluorobenzene (SURR)	32.18	796	124481	252.74	NG	89
49)	Styrene	33.93	841	275832	404.52	NG	95
50)	m-Xylene	34.32	851	160531	413.02	NG	99
50)	m-Xylene	35.52	882	298356	767.62	NG	93
51)	o+p-Xylenes	35.52	882	335699	838.28	NG	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1545::UU Quant Output File: ^D1545::AQ
Name: VSTD150
Misc: QC70367VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

Operator ID: KB6656
Quant Time: 901010 12:49
Injected at: 901010 12:10

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 12:49
Output File: ^D1545::AQ Injected at: 901010 12:10
Data File: >D1545::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/V0A, IFB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.47	262	40570	250.00	NG	94
2)	Methyl chloride	2.28	25	44470	539.71	NG	98
3)	Methyl bromide	3.40	54	38606	442.63	NG	96
4)	Dichlorodifluoromethane	4.22	75	68941	491.71	NG	98
5)	Vinyl chloride	4.33	78	95201	607.48	NG	98
6)	Chloroethane	5.53	109	73544	625.13	NG	94
7)	Methylene chloride	8.05	174	157078	585.58	NG	97
8)	Acrolein	9.02	199	61795	3835.40	NG	96
9)	Acetone	9.02	199	71378	936.01	NG	98
10)	Acrylonitrile	9.68	216	72675	1575.99	NG	93
11)	Carbon disulfide	9.64	215	301133	376.84	NG	98
12)	Trichlorofluoromethane	10.26	231	375878	645.04	NG	98
13)	1,1-Dichloroethylene	11.00	250	138186	614.02	NG	96
14)	1,1-Dichloroethane	12.36	285	259229	580.87	NG	96
15)	Tetrahydrofuran	12.44	287	44152	41191.70	NG	100
15)	Tetrahydrofuran	13.06	303	4030	3759.80	NG	100
16)	1,2-Trans-dichloroethylene	13.10	304	137972	606.75	NG	97
17)	Chloroform	13.68	319	390712	579.27	NG	99
18)	Freon TF	14.10	330	123237	582.65	NG	91
19)	1,2-Dichloroethane-D4 (SURR)	14.38	337	104803	260.77	NG	99
20)	1,2-Dichloroethane	14.45	339	309455	624.32	NG	97
22)	*1,4-Difluorobenzene	22.13	537	170228	250.00	NG	97
23)	Methyl ethyl ketone	14.45	339	20620	1283.30	NG	94
24)	1,1,1-Trichloroethane	15.81	374	368017	662.81	NG	99
25)	Carbon tetrachloride	15.81	374	42556	83.20	NG	97
25)	Carbon tetrachloride	16.24	385	339188	663.10	NG	99
26)	Vinyl acetate	16.39	389	236092	823.18	NG	98
27)	Dichlorobromomethane	16.74	398	297624	692.35	NG	97
28)	1,2-Dichloropropane	18.18	435	126014	631.26	NG	97
29)	cis-1,3-Dichloropropylene	18.45	442	182984	682.04	NG	99
30)	Trichloroethylene	19.03	457	223601	723.26	NG	96
31)	Chlorodibromomethane	19.61	472	234038	762.24	NG	97
32)	bis(Chloromethyl)ether	19.61	472	77151	703.70	NG	100
33)	Benzene	19.57	471	425614	693.01	NG	99
34)	1,1,2-Trichloroethane	19.73	475	134114	739.63	NG	91
35)	trans-1,3-Dichloropropylene	19.73	475	217920	712.62	NG	92
36)	2-Chloroethylvinyl ether	20.85	504	97345	1117.44	NG	100
37)	Bromoform	22.33	542	204523	978.76	NG	99
38)	*Chlorobenzene-d5	27.07	664	131270	250.00	NG	83
39)	Methyl-iso-butyl ketone	22.83	555	221889	1170.67	NG	97
40)	1,2,3-Trichloropropane	24.38	595	275145	10967.70	NG	99
41)	2-Hexanone	24.38	595	182227	1167.38	NG	92
42)	1,1,2,2-Tetrachloroethane	24.62	601	222114	926.38	NG	99

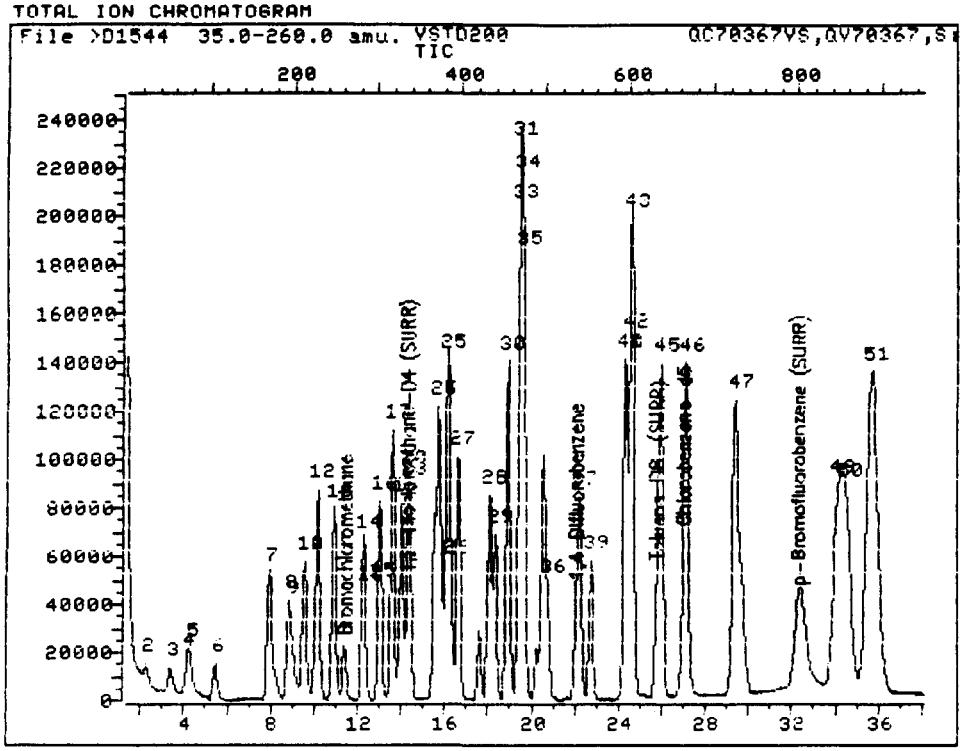
Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 12:49
Output File: ^D1545::AQ Injected at: 901010 12:10
Data File: >D1545::U0 Dilution Factor: 1.00000
Name: VSTD150
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/V0A, IFB, XV0A9, XV0A13, XV0A14, XV0A16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Tetrachloroethylene	24.73	604	180334	638.46	NG	99
44)	Toluene-D8 (SURR)	25.86	633	195257	255.98	NG	97
45)	Toluene	26.06	638	264155	638.88	NG	98
46)	Chlorobenzene	27.22	668	379124	637.02	NG	99
47)	Ethylbenzene	29.47	726	194840	639.50	NG	81
48)	p-Bromofluorobenzene (SURR)	32.42	802	124498	248.79	NG	88
49)	Styrene	34.21	848	428832	618.99	NG	95
50)	m-Xylene	34.60	858	240368	608.68	NG	94
51)	o+p-Xylenes	35.84	890	504906	1240.94	NG	89

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >D1544::U0 Quant Output File: ^D1544::AQ
Name: VSTD200
Misc: QC70367VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

Operator ID: KB6656
Quant Time: 901010 12:04
Injected at: 901010 11:25

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 12:04
Output File: ^D1544::AQ Injected at: 901010 11:25
Data File: >D1544::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.40	260	41512	250.00	NG	97
2)	Methyl chloride	2.25	24	62004	735.43	NG	99
3)	Methyl bromide	3.37	53	49355	553.03	NG	96
4)	Dichlorodifluoromethane	4.15	73	89817	626.07	NG	99
5)	Vinyl chloride	4.26	76	125380	781.90	NG	97
6)	Chloroethane	5.46	107	101200	840.69	NG	93
7)	Methylene chloride	7.91	170	206031	750.65	NG	98
8)	Acrolein	8.84	194	261459	15859.59	NG	99
9)	Acetone	8.88	195	87736	1124.41	NG	99
10)	Acrylonitrile	9.53	212	93358	1978.57	NG	93
11)	Carbon disulfide	9.53	212	411343	503.08	NG	99
12)	Trichlorofluoromethane	10.16	228	516827	866.79	NG	99
13)	1,1-Dichloroethylene	10.89	247	189881	824.57	NG	97
14)	1,1-Dichloroethane	12.25	282	346793	759.45	NG	96
15)	Tetrahydrofuran	12.37	285	47839	43618.70	NG	100
15)	Tetrahydrofuran	12.95	300	14346	13080.41	NG	100
16)	1,2-Trans-dichloroethylene	13.03	302	190596	819.15	NG	98
17)	Chloroform	13.61	317	536029	776.69	NG	99
18)	Freon TF	14.03	328	170424	787.46	NG	91
19)	1,2-Dichloroethane-D4 (SURR)	14.27	334	111108	270.18	NG	97
20)	1,2-Dichloroethane	14.38	337	419576	827.28	NG	98
22)	*1,4-Difluorobenzene	22.06	535	173924	250.00	NG	99
23)	Methyl ethyl ketone	14.34	336	25564	1557.18	NG	90
24)	1,1,1-Trichloroethane	15.74	372	495318	873.12	NG	96
25)	Carbon tetrachloride	15.74	372	55217	105.65	NG	97
25)	Carbon tetrachloride	16.13	382	462949	885.82	NG	98
26)	Vinyl acetate	16.32	387	313973	1071.46	NG	98
27)	Dichlorobromomethane	16.63	395	400538	911.95	NG	99
28)	1,2-Dichloropropane	18.07	432	172575	846.14	NG	95
29)	cis-1,3-Dichloropropylene	18.34	439	252743	922.03	NG	99
30)	Trichloroethylene	18.92	454	298313	944.42	NG	95
31)	Chlorodibromomethane	19.50	469	311106	991.71	NG	98
32)	bis(Chloromethyl)ether	19.50	469	103794	926.60	NG	100
33)	Benzene	19.46	468	571519	858.23	NG	96
34)	1,1,2-Trichloroethane	19.62	472	177208	956.52	NG	91
35)	trans-1,3-Dichloropropylene	19.66	473	293223	940.21	NG	92
36)	2-Chloroethylvinyl ether	20.75	501	117955	1325.26	NG	100
37)	Bromoform	22.22	539	265502	1243.58	NG	98
38)	*Chlorobenzene-d5	27.00	662	135100	250.00	NG	82
39)	Methyl-iso-butyl ketone	22.76	553	259334	1329.44	NG	94
40)	1,2,3-Trichloropropane	24.31	593	311276	12056.18	NG	99
41)	2-Hexanone	24.31	593	205417	1278.63	NG	92
42)	1,1,2,2-Tetrachloroethane	24.55	599	284630	1153.47	NG	99

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 12:04
Output File: ^D1544::AQ Injected at: 901010 11:29
Data File: >D1544::U0 Dilution Factor: 1.00000
Name: VSTD200
Misc: QC70367VS,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 11:29

	Compound	R.T.	Scan#	Area	Conc	Units	q
43)	Tetrachloroethylene	24.66	602	245642	845.02	NG	99
44)	Toluene-D8 (SURR)	25.79	631	201716	256.95	NG	97
45)	Toluene	25.98	636	360871	848.05	NG	98
46)	Chlorobenzene	27.16	666	517320	844.58	NG	97
47)	Ethylbenzene	29.41	724	265291	846.05	NG	79
48)	p-Bromofluorobenzene (SURR)	32.32	799	122732	238.31	NG	90
49)	Styrene	34.14	846	574280	805.44	NG	94
50)	m-Xylene	34.53	856	332177	817.32	NG	96
51)	o+p-Xylenes	35.70	886	687094	1640.84	NG	90

* Compound is ISTD

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETC Corp. Contract:

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

Lab File ID (Standard): >D1546 Data Analyzed: 10/10/90

Instrument ID: GC/MS D Time Analyzed: 1256

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) Pack

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	39299	11.46	170589	22.09	134567	27.03
UPPER LIMIT	78598		341178		269134	
LOWER LIMIT	19649		85295		67283	
	EPA SAMPLE NO.					
01	VBLK1	34564	11.57	154113	22.27	128796	27.24
02	A4720	29547	11.39	131933	22.20	110230	27.17
03	A4721	30644	11.59	137869	22.25	116521	27.22
04	A4721MS	29419	11.58	141067	22.28	117384	27.22
05	A4721MSD	27591	11.59	122351	22.25	101371	27.23
06							
07							
08							
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11							
12							
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15							
16							
17							
18							
19							
20							
21							
22							

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene-d5

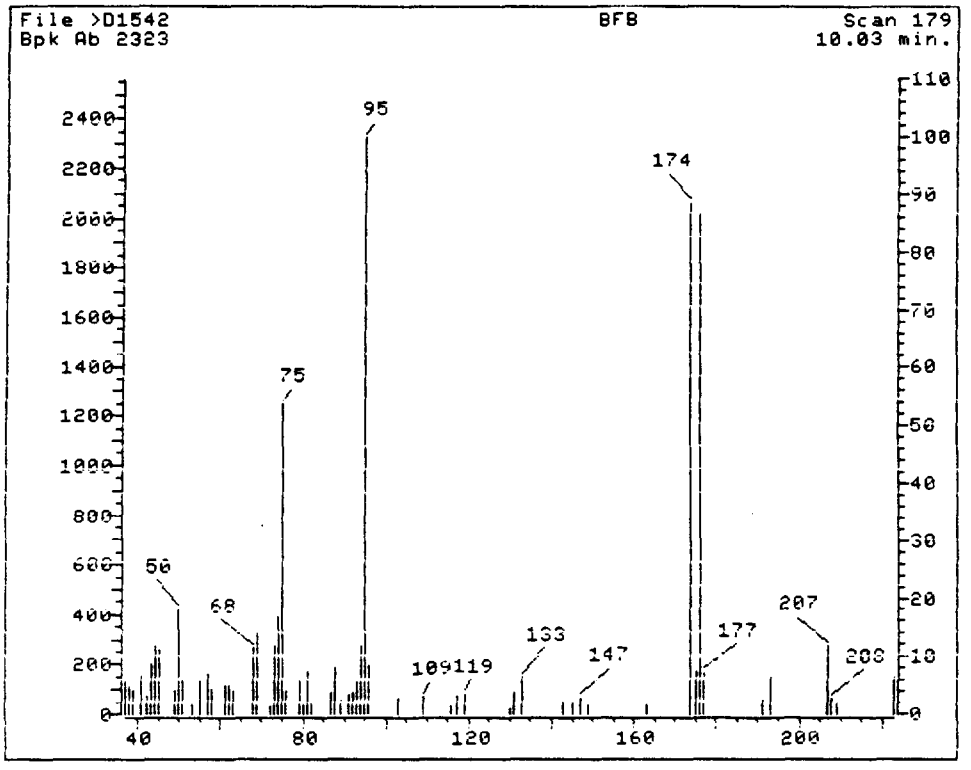
UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

RAW QC DATA

MS Data File: >D1542::U0

Name: ..... Operator: KB6656 Date/Time: 10/10/90 10:03
Misc: BFB



MS Data File: >D1542::U0

Name: ..... Operator: KB6656 Date/Time: 10/10/90 10:03
Misc: BFB

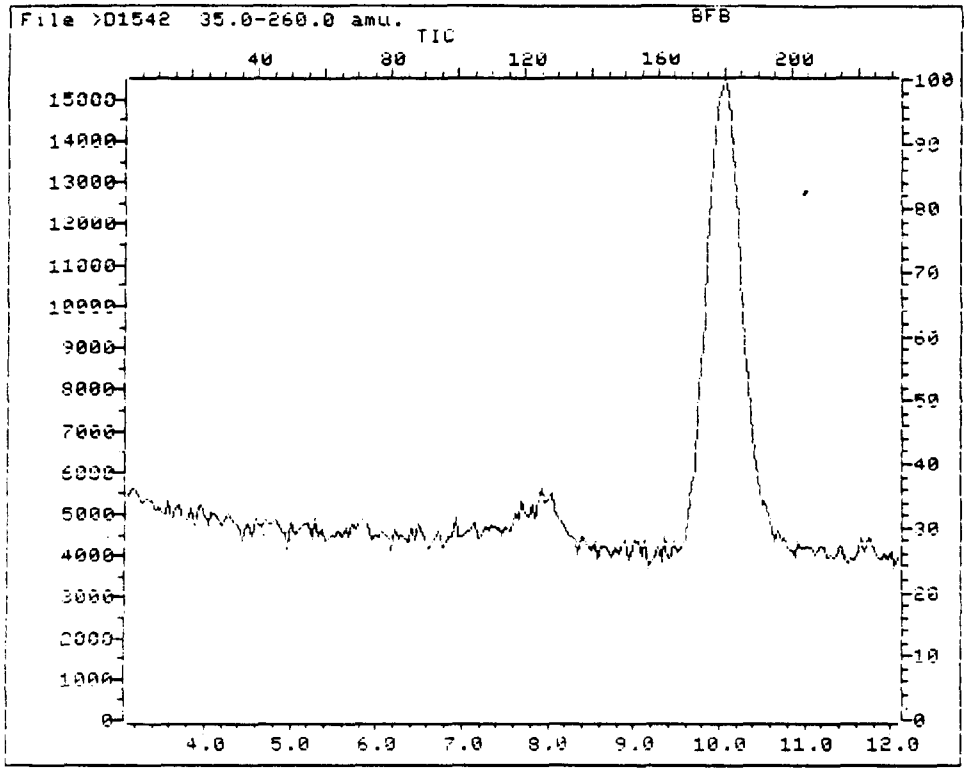
>D1542 BFB
179 NRM

File: >D1542 Scan #: 179 Retn. time: 10.03

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	5.682	57.05	7.232	79.05	6.070	96.05	8.351	149.00	1.636
38.05	4.606	58.15	4.477	80.05	1.636	103.05	2.884	163.00	1.808
39.05	4.176	61.05	5.166	81.05	7.576	109.15	3.013	173.90	88.377
41.05	6.715	62.05	5.080	82.05	2.023	115.90	1.464	175.00	7.361
42.05	3.099	63.05	4.219	87.05	3.788	117.10	3.186	175.90	86.741
43.05	8.696	68.05	11.365	88.05	7.964	119.00	3.487	177.00	7.103
44.05	11.924	69.05	14.034	89.05	2.325	130.00	1.119	191.05	2.368
45.05	10.977	72.05	1.507	91.15	3.358	131.10	3.702	192.95	6.500
49.05	4.176	73.05	11.838	92.05	3.788	133.00	6.414	207.05	11.623
50.05	18.123	74.05	16.746	93.05	5.811	143.00	1.894	208.05	2.669
51.05	6.027	75.05	53.681	94.05	11.752	145.00	1.980	209.05	1.894
53.05	1.593	76.05	4.176	95.05	100.000	147.10	2.841	223.05	6.285
55.05	5.725								

MS Data File: >D1542::U0

Name: ..... Operator: KB6656 Date/Time: 10/10/90 10:03
Misc: BFB



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70367V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >D1548

Level: (low/med) LOW Date Received: 10/10/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	U
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK1

Lab Name: ETC Corp Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70367V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: 7D1548

Level: (low/med) LOW Date Received: 10/10/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Tetrahydrofuran	10	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK1

Lab Name: ETC Corp. | Laboratory Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70367V

Sample wt/vol: 5.0 (g/mL) G Lab File ID: >D1548

Level: (low/med) LOW Date Received: 10/9/90

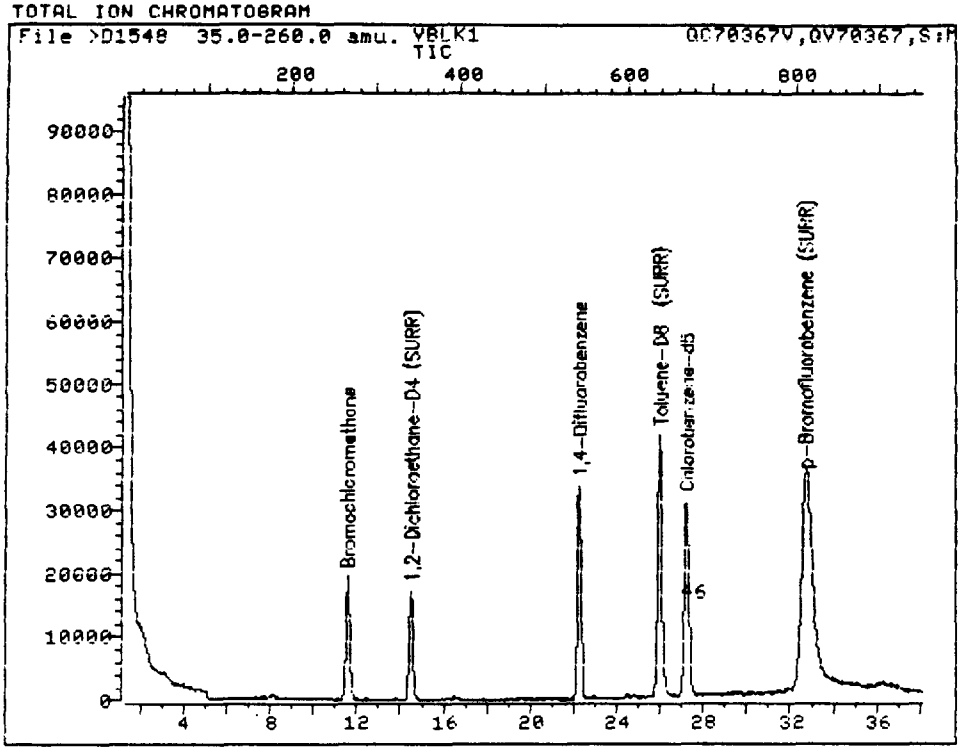
% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q

TOTAL ION CHROMATOGRAM



Data File: >D1548::UU Quant Output File: ^D1548::AQ
Name: VBLK1
Misc: QC70367V,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

Operator ID: KB6656
Quant Time: 901010 15:04
Injected at: 901010 14:25

QUANT REPORT Page 1

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 15:04
Output File: ^D1548::AQ Injected at: 901010 14:25
Data File: >D1548::U0 Dilution Factor: 1.00000
Name: VBLK1
Misc: QC70367V,QV70367,S:M4,5,,

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.57	266	34564	250.00	NG	92
19)	1,2-Dichloroethane-D4 (SURR)	14.52	342	90625	260.26	NG	97
22)	*1,4-Difluorobenzene	22.27	542	154113	250.00	NG	98
38)	*Chlorobenzene-d5	27.24	670	128796	250.00	NG	80
44)	Toluene-D8 (SURR)	26.00	638	179008	234.38	NG	95
46)	~~Chlorobenzene~~	27.36	673	2509	~~4.98 NG~~ →		67
48)	p-Bromofluorobenzene (SURR)	32.71	811	127564	258.52	NG	90

* Compound is ISTD

KB 10/11/90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721MS

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721VS

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1551

Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	7	
67-64-1	Acetone	18	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	64	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	45	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	55	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	59	
108-90-7	Chlorobenzene	57	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721MS

Lab Name: ETC Corp Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: ETC4721MS

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1551

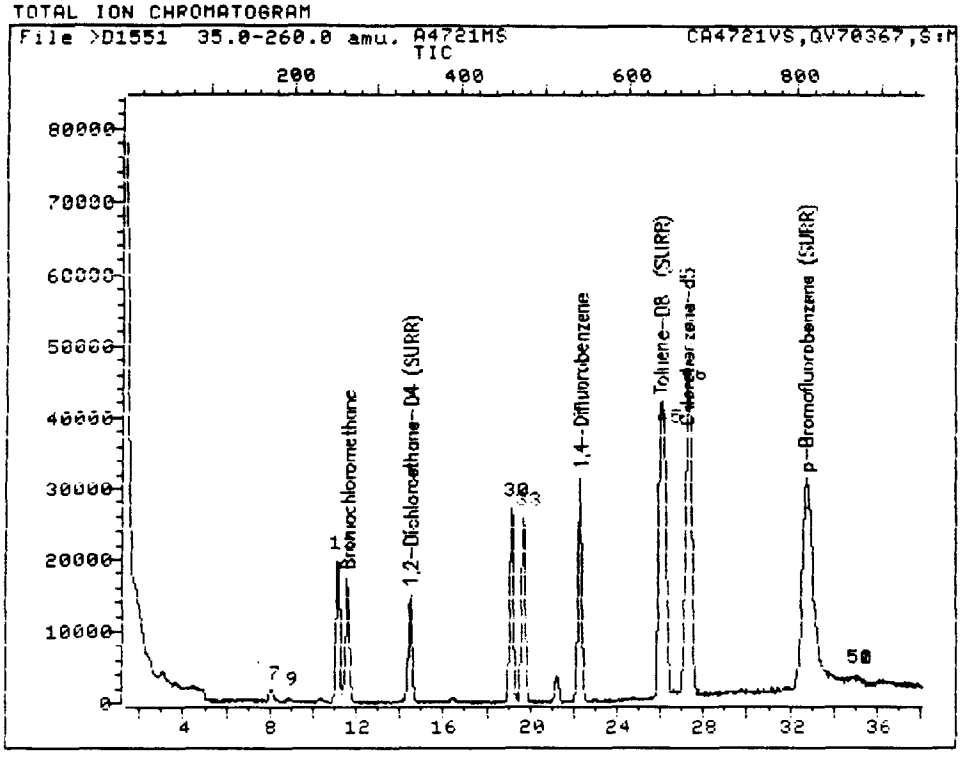
Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Tetrahydrofuran	10	U

TOTAL ION CHROMATOGRAM



Data File: >D1551::UO Quant Output File: ^D1551::AQ
Name: A4721MS
Misc: CA4721VS,QV70367,S:M4,5,,

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

Operator ID: KB6656
Quant Time: 901010 18:16
Injected at: 901010 17:37

QUANT REPORT

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 18:16
Output File: ^D1551::AQ Injected at: 901010 17:37
Data File: ^D1551::U0 Dilution Factor: 1.00000
Name: A4721MS
Misc: CA4721VS,QV70367,S:M4,5,,, KB 10/11/90

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.58	265	29419	250.00	NG	94
7)	Methylene chloride	8.06	174	5733	36.58	NG	96
9)	Acetone	8.87	195	6352	86.15	NG	96
13)	1,1-Dichloroethylene	11.12	253	42573	314.86	NG	93
19)	1,2-Dichloroethane-D4 (SURR)	14.49	340	77770	262.40	NG	93
22)	*1,4-Difluorobenzene	22.28	541	141067	250.00	NG	99
30)	Trichloroethylene	19.14	460	54385	219.34	NG	98
32)	bis(Chloromethyl)ether	19.69	474	8420	99.17	NG	100
33)	Benzene	19.69	474	130113	268.87	NG	96
38)	*Chlorobenzene-d5	27.22	668	117384	250.00	NG	81
44)	Toluene-D8 (SURR)	26.01	637	164878	236.87	NG	95
45)	Toluene	26.21	642	92492	288.36	NG	99
46)	Chlorobenzene	27.37	672	128233	279.32	NG	97
48)	p-Bromofluorobenzene (SURR)	32.72	810	118006	262.40	NG	92
50)	m-Xylene	34.98	868	3093	18.34	NG	85
51)	o+p-Xylenes	34.98	868	3093	9.93	NG	81

* Compound is ISTD

KB 10/11/90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721MSD

Lab Name: ETC Corp. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721VR

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1552

Level: (low/med) LOW Date Received: 10/1/90

% Moisture: not dec. 0 Date Analyzed: 10/10/90

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	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	11	
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	65	
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichlorethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	46	
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	56	
10061-02-6	trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	60	
108-90-7	Chlorobenzene	57	
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Xylene (total)	5	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ETC Corp Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721VK

Sample wt/vol: 4.9 (g/mL) G Lab File ID: >D1552

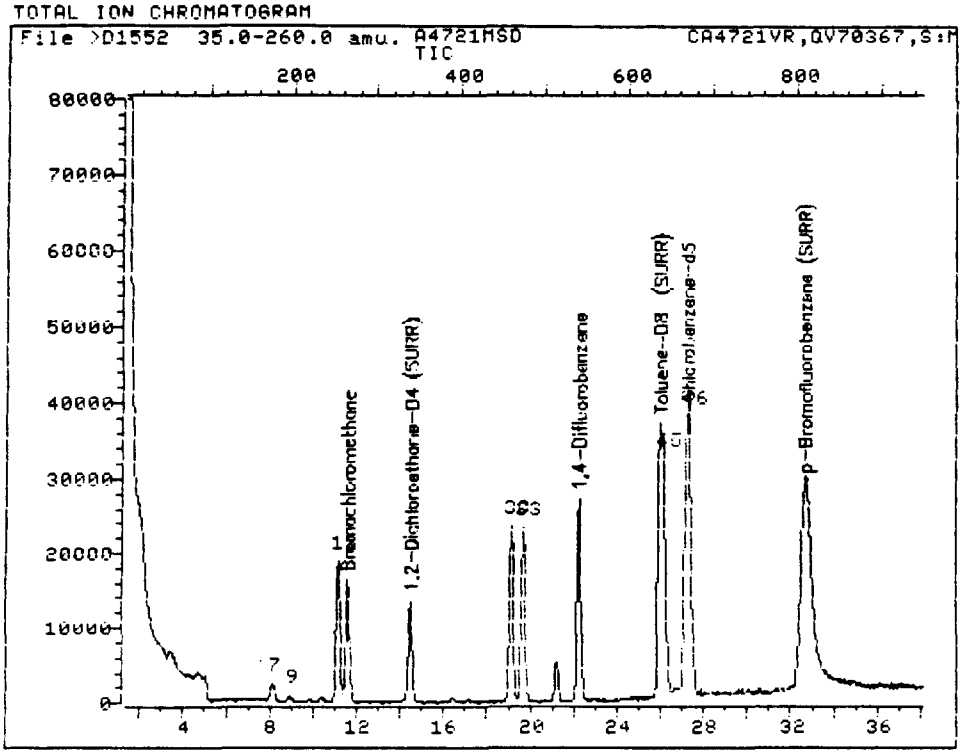
Level: (low/med) Low Date Received: 10/1/92

% Moisture: not dec. 0 Date Analyzed: 10/10/92

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
	Tetrahydrofuran	10	U

TOTAL ION CHROMATOGRAM



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Name: A4721MSD
Misc: CA4721VR,QV70367,S:M4,$,, 4.92 KB 10/11/90

Id File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

Operator ID: KB6656
Quant Time: 901010 19:02
Injected at: 901010 18:22

QUANT REPORT

Operator ID: KB6656 Quant Rev: 7 Quant Time: 901010 19:02
Output File: ^D1552::AQ Injected at: 901010 18:22
Data File: >D1552::U0 Dilution Factor: 1.00000
Name: A4721MSD
Misc: CA4721UR,QU70367,S:M4,$\cancel{B}$,, 442 KB 10/11/90

ID File: ID0270::US
Title: PP/VOA, IFB, XVOA9, XVOA13, XVOA14, XVOA16
Last Calibration: 901010 14:36

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*Bromochloromethane	11.59	265	27591	250.00	NG	91
7)	Methylene chloride	8.10	175	7650	52.05	NG	98
9)	Acetone	8.91	196	5796	83.82	NG	96
13)	1,1-Dichloroethylene	11.16	254	40416	318.71	NG	90
19)	1,2-Dichloroethane-D4 (SURR)	14.50	340	70474	253.53	NG	94
22)	*1,4-Difluorobenzene	22.25	540	122351	250.00	NG	99
30)	Trichloroethylene	19.11	459	48480	225.43	NG	97
32)	~~bis(Chloromethyl)ether~~	19.65	473	7482	~~101.19~~	NG	100
33)	Benzene	19.69	474	116183	276.81	NG	95
38)	*Chlorobenzene-d5	27.23	668	101371	250.00	NG	79
44)	Toluene-D8 (SURR)	25.99	636	138463	230.34	NG	95
45)	Toluene	26.18	641	81110	292.95	NG	97
46)	Chlorobenzene	27.34	671	110821	279.52	NG	96
48)	p-Bromofluorobenzene (SURR)	32.66	808	102899	264.95	NG	89

* Compound is ISTD

KB 10/11/90

SEMIVOLATILE DATA

QC SUMMARY

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ETCNJ Contract: _____

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

Level: (LOW/MED) LOW

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	SBLK01	68	69	76	100	74	86		0
02	A4721	64	67	60	87	67	78		0
03	A4720	72	72	77	97	70	87		0
04	A4720MS	69	65	73	77	76	82		0
05	A4720MSD	75	71	69	89	75	86		0
06									
07									
08									
09									
10									
11									
12									
13									
14									
15									
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26									
27									
28									
29									
30									

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(23-120)
S2 (FBP) = 2-Fluorobiphenyl	(30-115)
S3 (TPH) = Terphenyl-d14	(18-137)
S4 (PHL) = Phenol-d5	(24-113)
S5 (2FP) = 2-Fluorophenol	(25-121)
S6 (TBP) = 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside QC limits
D Surrogates diluted out

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETCNJ Contract: _____

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

Matrix Spike - EPA Sample No.: A4720 Level: (LOW/MED) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	#	QC LIMITS REC.
Phenol	7927.070	0.000	4682.791	59		26- 90
2-Chlorophenol	7927.070	0.000	4377.257	55		25-102
1,4-Dichlorobenzene	3963.535	0.000	2511.117	63		28-104
N-Nitroso-di-n-prop.(1)	3963.535	0.000	3050.872	77		41-126
1,2,4-Trichlorobenzene	3963.535	0.000	2488.333	63		38-107
4-Chloro-3-methylphenol	7927.070	0.000	5505.150	69		26-103
Acenaphthene	3963.535	0.000	2477.722	63		31-137
4-Nitrophenol	7927.070	0.000	15713.693	198	*	11-114
2,4-Dinitrotoluene	3963.535	0.000	2892.296	73		28- 89
Pentachlorophenol	7927.070	0.000	5565.026	70		17-109
Pyrene	3963.535	0.000	2882.431	73		35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	#	% RPD	#	QC LIMITS RPD	QC LIMITS REC.
Phenol	7911.394	4870.446	62		4		35	26- 90
2-Chlorophenol	7911.394	4558.705	58		4		50	25-102
1,4-Dichlorobenzene	3955.697	2571.632	65		3		27	28-104
N-Nitroso-di-n-prop.(1)	3955.697	2165.801	55		34		38	41-126
1,2,4-Trichlorobenzene	3955.697	2635.572	67		6		23	38-107
4-Chloro-3-methylphenol	7911.394	5724.582	72		4		33	26-103
Acenaphthene	3955.697	2514.800	64		2		19	31-137
4-Nitrophenol	7911.394	15088.521	191	*	4		50	11-114
2,4-Dinitrotoluene	3955.697	2884.790	73		0		47	28- 89
Pentachlorophenol	7911.394	6323.474	80		13		47	17-109
Pyrene	3955.697	3387.058	86		16		36	35-142

1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of limits

RPD: 0 out of 11 outside limits
Spike Recovery: 2 out of 22 outside limits

Comments: _____ 70

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: ETCNJ Contract: _____

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

Lab File ID: >P0238 Lab Sample ID: SBLK01

Date Extracted: 10/11/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed 10/20/90 Time Analyzed: 0324

Matrix: (soil/water) SOIL Level:(low/med) LOW

Instrument ID: GC/MS P

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	A4721	CA4721C	>P0239	10/20/90
02	A4720	CA4720C	>P0240	10/20/90
03	A4720MS	CA4720CS	>P0241	10/20/90
04	A4720MSD	CA4720CR	>P0242	10/20/90
05				
06				
07				
08				
09				
10				
11				
12				
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26				
27				
28				
29				
30				

Comments: _____

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ETCNJ Contract: _____

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

Lab File ID: >P0221 DFTPP Injection Date: 10/19/90

Instrument ID: GC/MS P DFTPP Injection Time: 1533

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	55.8
68	Less than 2.0 % of mass 69	0.0 (0.)1
69	Mass 69 relative abundance	65.6
70	Less than 2.0% of mass 69	.3 (.)1
127	40.0 - 60.0% of mass 198	41.6
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.4
275	10.0 - 30.0% of mass 198	22.7
365	Greater than 1.00% of mass 198	2.8
441	Present, but less than mass 443	13.0
442	Greater than 40.0% of mass 198	93.9
443	17.0 - 23.0% of mass 442	17.5 (18.)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD160	BNAV160PPM	>P0222	10/19/90	1549
02	SSTD120	BNAIV120PPM	>P0223	10/19/90	1638
03	SSTD80	BNAIII80PPM	>P0224	10/19/90	1726
04	SSTD50	BNAII50PPM	>P0225	10/19/90	1815
05	SSTD20	BNAI20PPM	>P0226	10/19/90	1904
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ETCNJ Contract: _____

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

Lab File ID: >P0234 DFTPP Injection Date: 10/20/90

Instrument ID: GC/MS P DFTPP Injection Time: 0130

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.6
68	Less than 2.0 % of mass 69	0.0 (0.)1
69	Mass 69 relative abundance	67.0
70	Less than 2.0% of mass 69	.4 (.)1
127	40.0 - 60.0% of mass 198	41.5
197	Less than 1.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	20.9
365	Greater than 1.00% of mass 198	2.7
441	Present, but less than mass 443	14.3
442	Greater than 40.0% of mass 198	99.0
443	17.0 - 23.0% of mass 442	18.6 (18.)2

1-Value is % mass 69 2-Value is % mass 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD50	BNAI150PPM	>P0235	10/20/90	0147
02	SBLK01	QC70282C	>P0238	10/20/90	0324
03	A4721	CA4721C	>P0239	10/20/90	0413
04	A4720	CA4720C	>P0240	10/20/90	0501
05	A4720MS	CA4720CS	>P0241	10/20/90	0550
06	A4720MSD	CA4720CR	>P0242	10/20/90	0639
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

SAMPLE DATA

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720C

Sample wt/vol: ~~25.6~~ 30 (g/mL) G Lab File ID: >P0240

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 8% dec. 16 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: ~~32767~~ 1

(CA 10/20/90)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	390	U
111-44-4	bis(2-Chloroethyl)ether	390	U
95-57-8	2-Chlorophenol	390	U
541-73-1	1,3-Dichlorobenzene	390	U
106-46-7	1,4-Dichlorobenzene	390	U
100-51-6	Benzyl alcohol	390	U
95-50-1	1,2-Dichlorobenzene	390	U
95-48-7	2-Methylphenol	390	U
108-60-1	bis(2-Chloroisopropyl)ether	390	U
106-44-5	4-Methylphenol	390	U
621-64-7	N-Nitroso-di-n-propylamine	390	U
67-72-1	Hexachloroethane	390	U
98-95-3	Nitrobenzene	390	U
78-59-1	Isophorone	950	B
88-75-5	2-Nitrophenol	390	U
105-67-9	2,4-Dimethylphenol	390	U
65-85-0	Benzoic acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	390	U
120-83-2	2,4-Dichlorophenol	390	U
120-82-1	1,2,4-Trichlorobenzene	390	U
91-20-3	Naphthalene	390	U
106-47-8	4-Chloroaniline	390	U
87-68-3	Hexachlorobutadiene	390	U
59-50-7	4-Chloro-3-methylphenol	390	U
91-57-6	2-Methylnaphthalene	390	U
77-47-4	Hexachlorocyclopentadiene	390	U
88-06-2	2,4,6-Trichlorophenol	390	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	390	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	390	U
208-96-8	Acenaphthylene	390	U
606-20-2	2,6-Dinitrotoluene	390	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720C

Sample wt/vol: ~~25.6~~ 30 (g/mL) G Lab File ID: >P0240

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 9/6 dec. 16 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: ~~32767~~ 1

(2) 10-30-90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	390	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	780	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	200	J
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenz(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

A4720

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >P0240

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 16 dec. Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

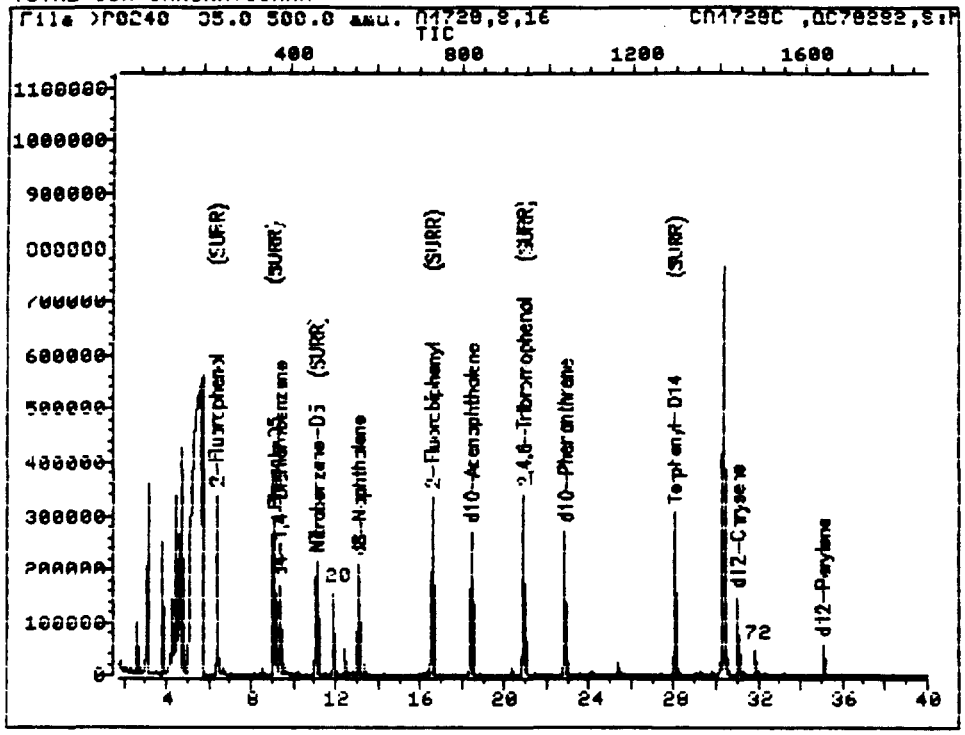
GPC Cleanup: (Y/N) N pH: 8.0 Dilution Factor: 1.0

Number TICs found: 12

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.	Aldol Condensate	5.65	58000	BJ
02. 4337-65-9	Hexanedioic acid, mono(2-eth	30.36	13000	BJ
03.	Unknown Alkane	4.69	8500	BJ
04.	Unknown Alkane	4.49	5900	BJ
05. 108-88-3	Benzene, methyl- (9CI)	3.05	2900	BJ
06.	Aldol Condensate	3.80	2700	BJ
07. 54549-80-3	Cyclopentane, 2-ethyl-1,1-di	4.25	1600	BJ
08. 61141-74-0	2-Hexanone, 4-hydroxy-5-meth	2.62	800	BJ
09.	Unknown Alkene	4.16	760	BJ
10. 10570-40-8	4H-1,2,4-Triazole, 4-methyl-	12.42	260	J
11. 55170-84-8	Cyclobutane, 1-hexyl-2,3-dim	30.16	370	BJ
12. 3073-66-3	Cyclohexane, 1,1,3-trimethyl	4.78	370	BJ

TOTAL ION CHROMATOGRAM



Data File: >P0240::U5 Quant Output File: ^P0240::AQ
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.56,1 BTL#20

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

Operator ID: KV0786
Quant Time : 901025 12:40
Injected at: 901020 05:01

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901025 12:40
Output File: ^P0240::AQ Injected at: 901020 05:01
Data File: >P0240::U5 Dilution Factor: 1.00000
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.56,1 BTL#20

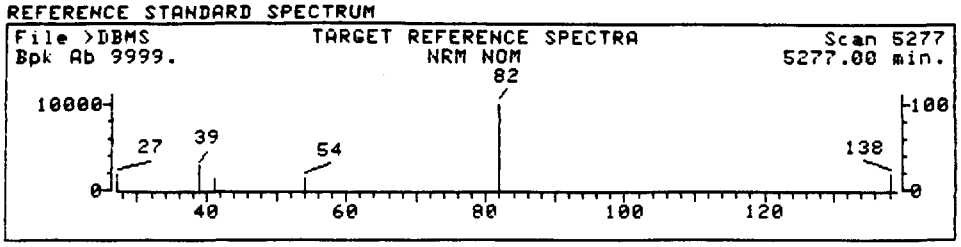
ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.33	374	71770	40.00	UG/ML	90
3)	2-Fluorophenol	(SURR)	6.34	227	280431	140.85	UG/ML	96
5)	Phenol-D5	(SURR)	9.07	361	483559	193.13	UG/ML	99
17)	*d8-Naphthalene		13.08	558	299585	40.00	UG/ML	97
18)	Nitrobenzene-D5	(SURR)	11.10	461	263985	72.49	UG/ML	85
20)	Isophorone		11.90	500	182382	24.27	UG/ML	92
32)	*d10-Acenaphthalene		18.42	821	171428	40.00	UG/ML	99
36)	2-Fluorobiphenyl	(SURR)	16.57	730	391858	72.36	UG/ML	98
52)	2,4,6-Tribromophenol	(SURR)	20.93	944	167655	174.61	UG/ML	98
54)	*d10-Phenanthrene		22.88	1040	313432	40.00	UG/ML	99
65)	*d12-Chrysene		31.01	1440	163376	40.00	UG/ML	95
67)	Terphenyl-D14	(SURR)	28.02	1293	475997	77.50	UG/ML	94
72)	bis(2-Ethylhexyl)phthalate		31.81	1479	27243	4.99	UG/ML	92
73)	*d12-Perylene		35.06	1639	77200	40.00	UG/ML	81

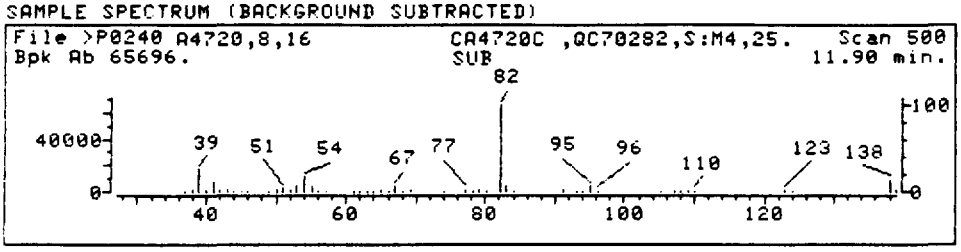
* Compound is ISTD

EN
10-30-90

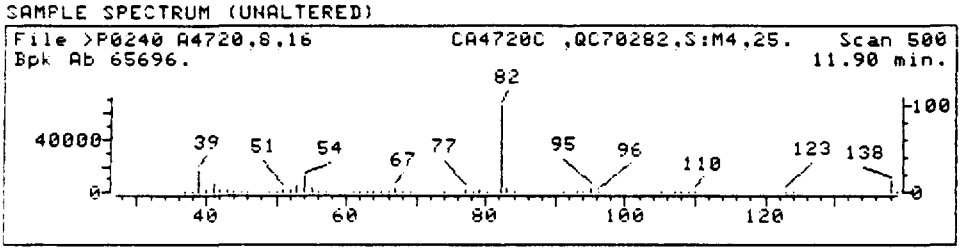
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



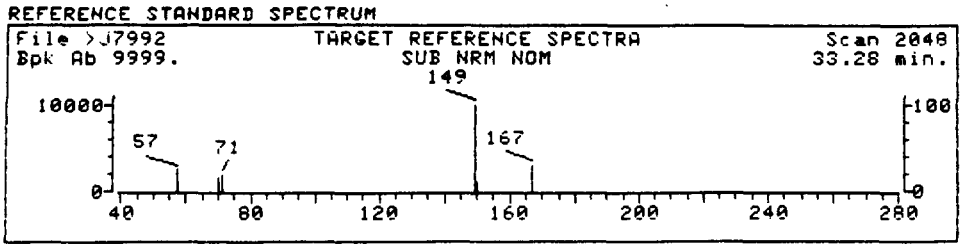
SAMPLE SPECTRUM (UNALTERED)



Data File: >P0240::U5 Quant Output File: ^P0240::AQ
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
Quant Time: 901025 12:40 Quant ID File: IP0092::PF
Injected at: 901020 05:01 Last Calibration: 901022 14:02
Last Qcal Time: 901020 01:47

Compound No : 20
Compound Name : Isophorone
Scan Number : 500
Retention Time: 11.90 min.
Quant Ion : 82.0
Area : 182382
Concentration : 24.27 UG/ML
q-value : 92

REFERENCE STANDARD SPECTRUM



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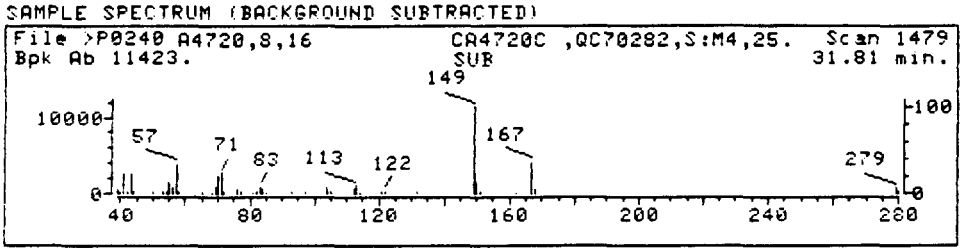
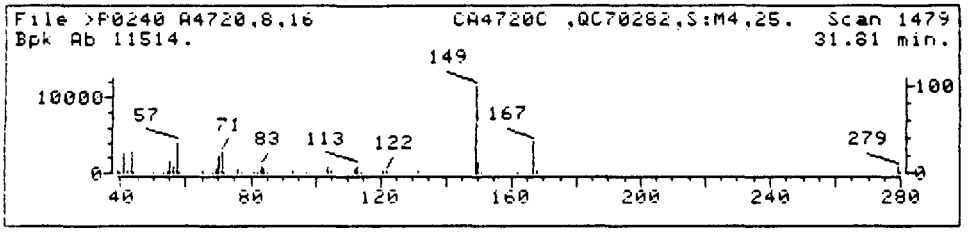
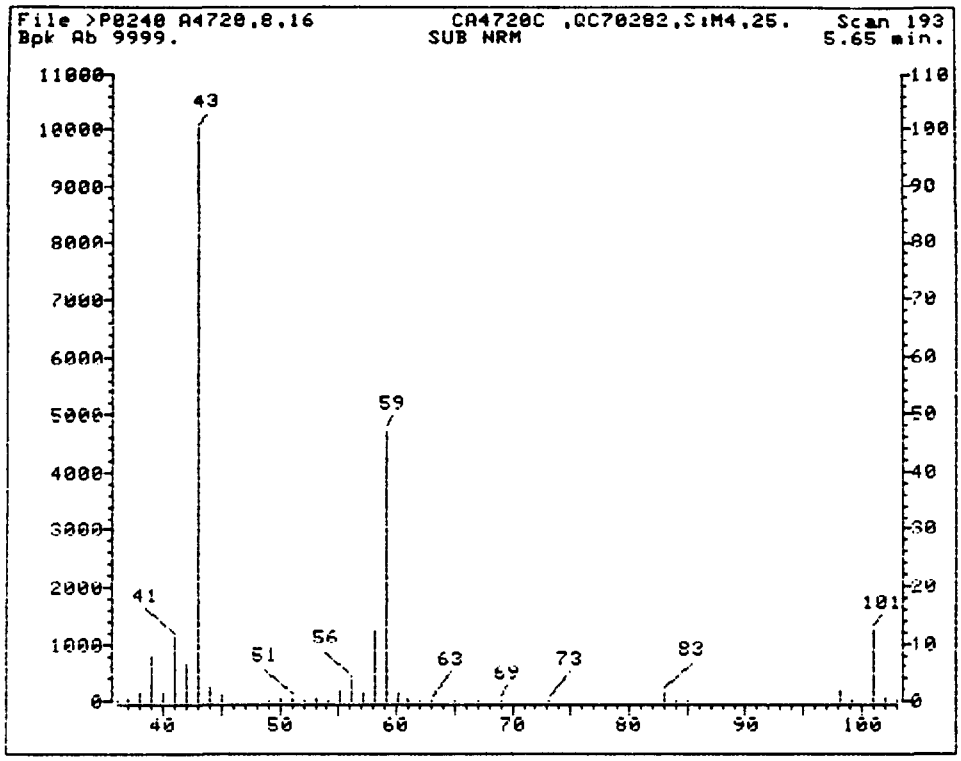


SAMPLE SPECTRUM (UNALTERED)



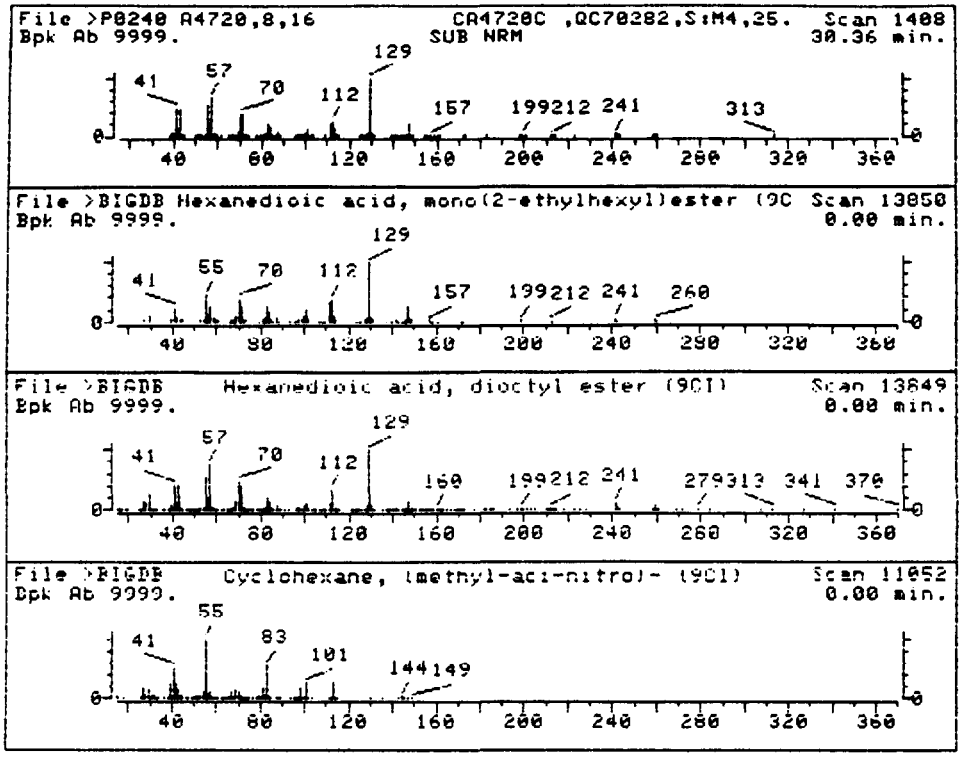
Data File: >P0240::U5 Quant Output File: ^P0240::AQ
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
Quant Time: 901025 12:40 Quant ID File: IP0092::PF
Injected at: 901020 05:01 Last Calibration: 901022 14:02
Last Qcal Time: 901020 01:47

Compound No : 72
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1479
Retention Time: 31.81 min.
Quant Ion : 149.0
Area : 27243
Concentration : 4.99 UG/ML
q-value : 92



Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 5.65
Scan: 193
Area: 16330228 Rank: 1
Semi-quantitative Conc (uncorrected): 1475.56 UG/ML
Semi-quantitative Conc (corrected): 57729.22 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

No PBM hits for this scan.



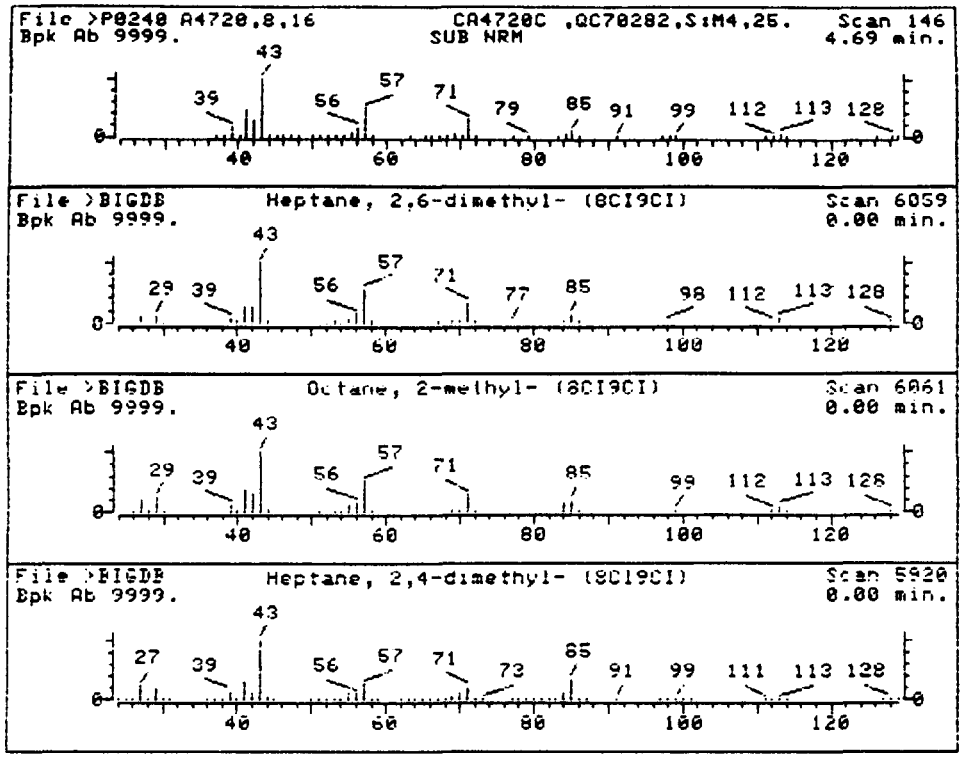
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 30.36
Scan: 1408
Area: 3733496 Rank: 2
Semi-quantitative Conc (uncorrected): 333.45 UG/ML
Semi-quantitative Conc (corrected): 13045.91 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Hexanedioic acid, mono(2-ethylhexyl)ester (9CI)	258	C14H26O4
2.	Hexanedioic acid, dioctyl ester (9CI)	370	C22H42O4
3.	Cyclohexane, (methyl-aci-nitro)- (9CI)	143	C7H13NO2

Sample file: >P0240 Spectrum #: 1408
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	71	4337659	13850	"BIGDB	96	49	0	0	59	29	29	69
2.	69	123795	13849	"BIGDB	130	34	1	2	54	34	26	67
3.	31*	55937978	11052	"BIGDB	46	46	2	1	31	42	8	19



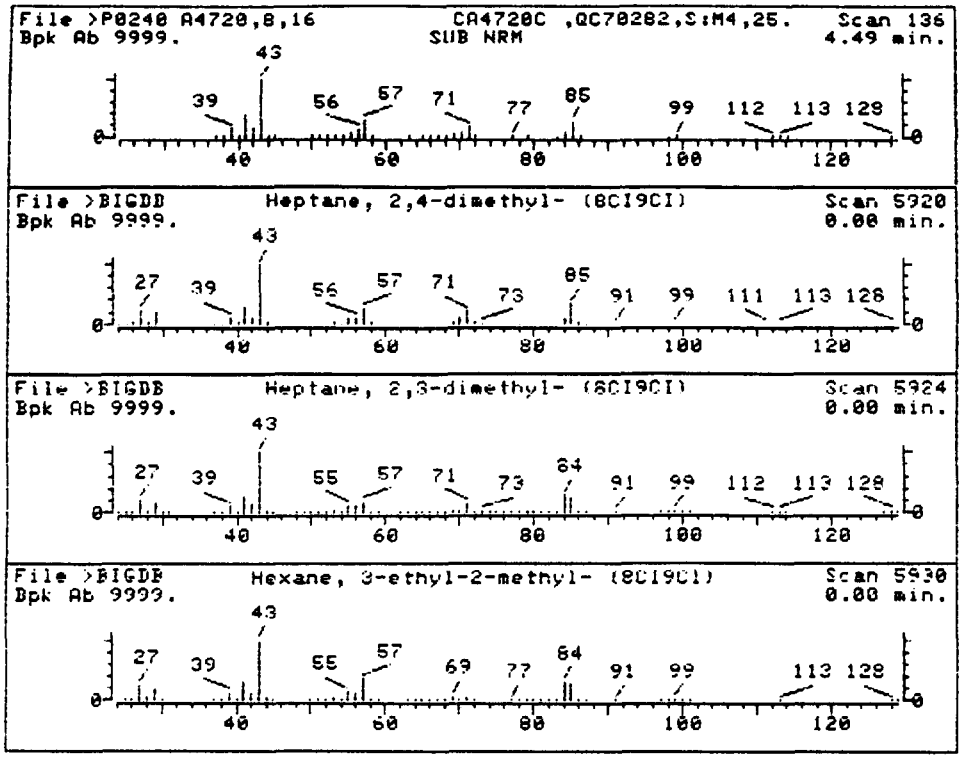
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 4.69
Scan: 146
Area: 2398499 Rank: 3
Semi-quantitative Conc (uncorrected): 216.72 UG/ML
Semi-quantitative Conc (corrected): 8478.97 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,6-dimethyl- (8CI9CI)	128 C9H20
2.	Octane, 2-methyl- (8CI9CI)	128 C9H20
3.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20

Sample file: >P0240 Spectrum #: 146
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	89*	1072055	6059	"BIGDB	58	34	0	0	67	5	66	71
2.	71*	3221612	6061	"BIGDB	56	39	2	3	92	11	38	34
3.	43*	2213232	5920	"BIGDB	28	64	2	0	100	24	17	14



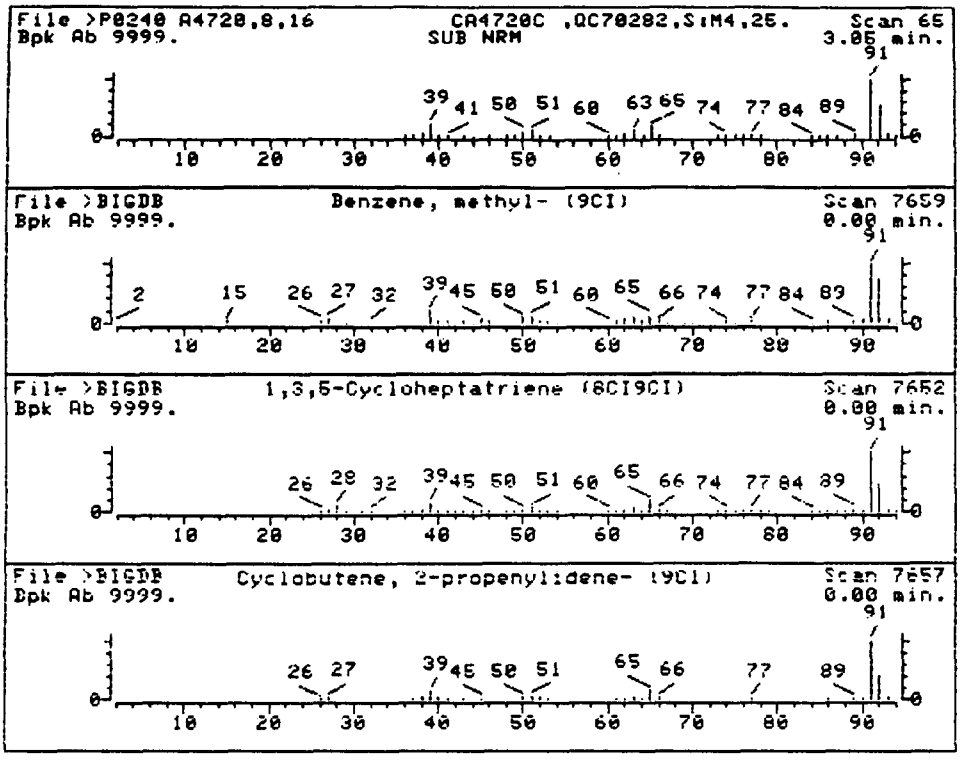
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 4.49
Scan: 136
Area: 1671696 Rank: 4
Semi-quantitative Conc (uncorrected): 151.05 UG/ML
Semi-quantitative Conc (corrected): 5909.63 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20
2.	Heptane, 2,3-dimethyl- (8CI9CI)	128 C9H20
3.	Hexane, 3-ethyl-2-methyl- (8CI9CI)	128 C9H20

Sample file: >P0240 Spectrum #: 136
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	94*	2213232	5920	"BIGDB	73	19	0	0	71	1	72	92
2.	60	3074713	5924	"BIGDB	41	50	1	0	78	12	30	14
3.	60*	16789461	5930	"BIGDB	22	65	3	0	100	15	30	12



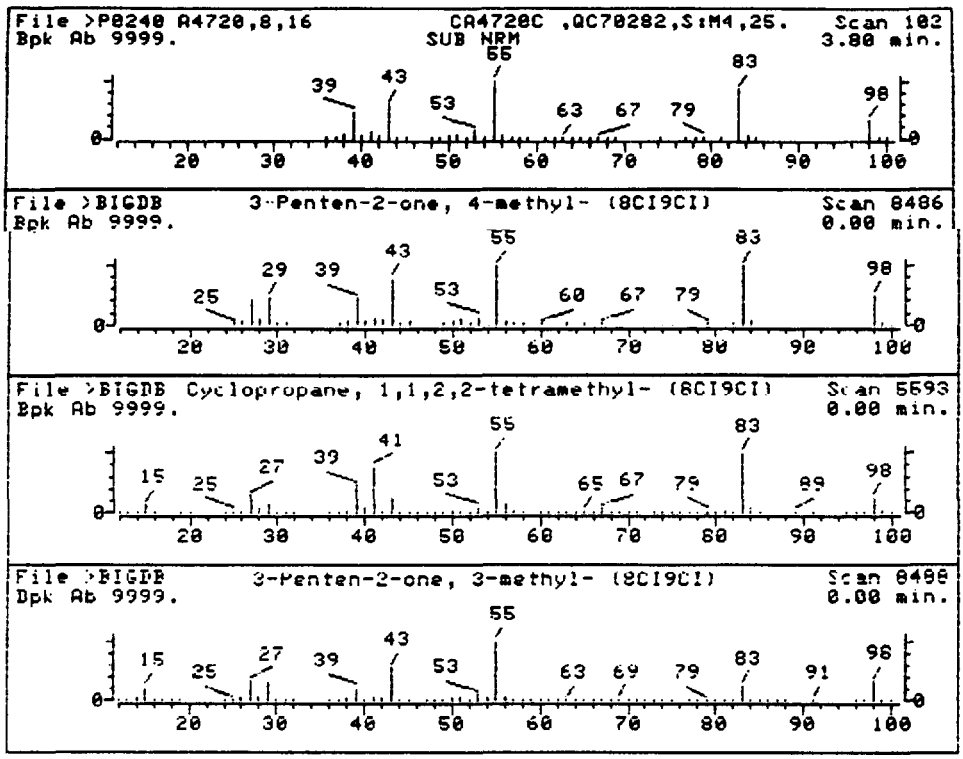
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 3.05
Scan: 65
Area: 811920 Rank: 11
Semi-quantitative Conc (uncorrected): 73.36 UG/ML
Semi-quantitative Conc (corrected): 2870.23 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Benzene, methyl- (9CI)	92 C7H8
2.	1,3,5-Cycloheptatriene (8CI9CI)	92 C7H8
3.	Cyclobutene, 2-propenylidene- (9CI)	92 C7H8

Sample File: >P0240 Spectrum #: 65
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	93*	108883	7659	"BIGDB	75	15	1	0	70	3	68	89
2.	86*	544252	7652	"BIGDB	50	35	2	0	85	0	60	31
3.	79*	52097855	7657	"BIGDB	51	28	2	0	100	6	48	33



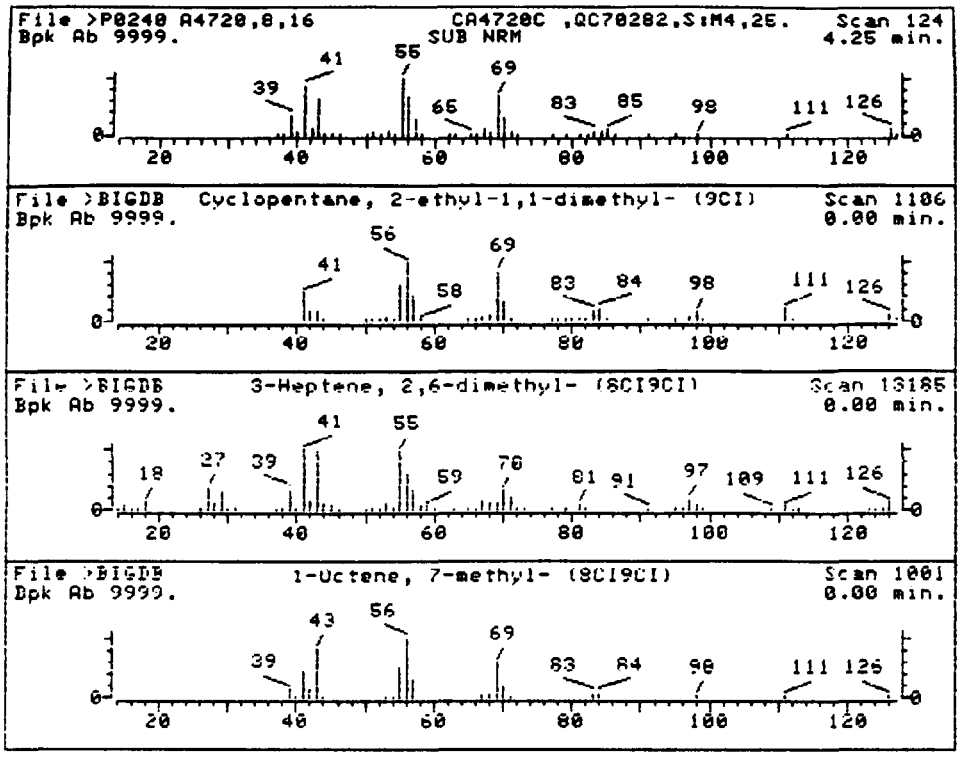
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 3.80
Scan: 102
Area: 761381 Rank: 12
Semi-quantitative Conc (uncorrected): 68.80 UG/ML
Semi-quantitative Conc (corrected): 2691.57 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	3-Penten-2-one, 4-methyl- (8CI9CI)	98	C6H10O
2.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI9CI)	98	C7H14
3.	3-Penten-2-one, 3-methyl- (8CI9CI)	98	C6H10O

Sample file: >P0240 Spectrum #: 102
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	141797	8486	"BIGDB	79	19	3	2	67	2	63	46
2.	78*	4127473	5593	"BIGDB	43	54	2	0	86	5	55	19
3.	59*	565628	8488	"BIGDB	57	35	0	0	74	46	14	69



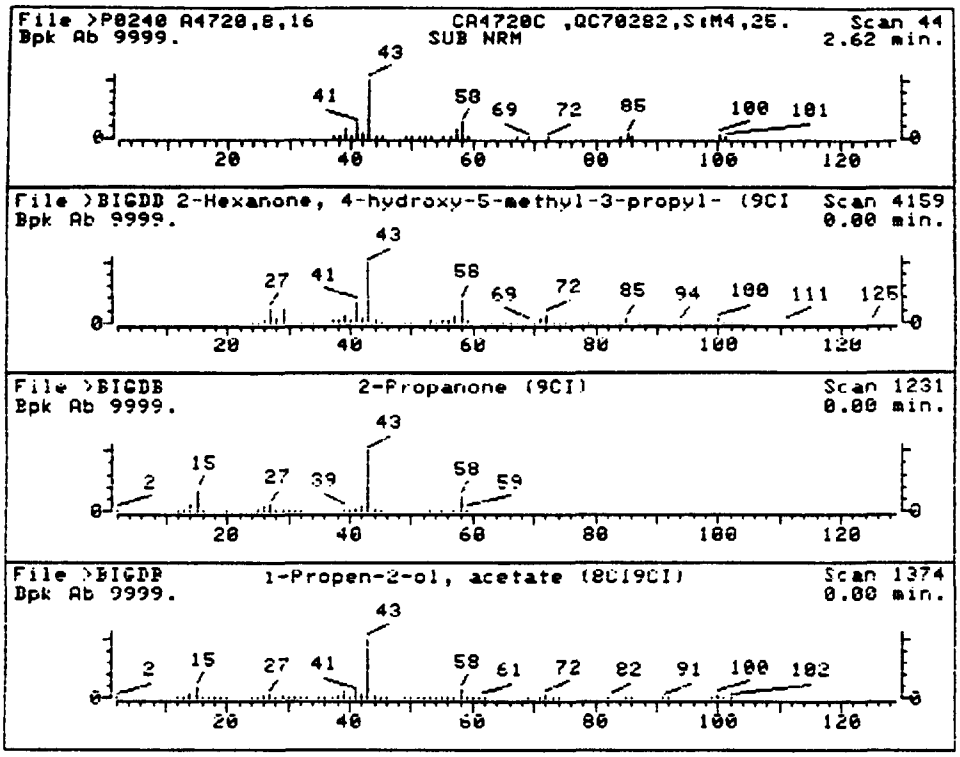
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 4.25
Scan: 124
Area: 447648 Rank: 13
Semi-quantitative Conc (uncorrected): 40.45 UG/ML
Semi-quantitative Conc (corrected): 1582.49 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Cyclopentane, 2-ethyl-1,1-dimethyl- (9CI)	126	C9H18
2.	3-Heptene, 2,6-dimethyl- (8CI9CI)	126	C9H18
3.	1-Octene, 7-methyl- (8CI9CI)	126	C9H18

Sample File: >P0240 Spectrum #: 124
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	42*	54549803	1106	"BIGDB	44	65	3	0	67	23	17	13
2.	42*	2738183	13185	"BIGDB	37	68	3	0	87	25	17	13
3.	35*	13151069	1001	"BIGDB	52	38	0	3	67	51	10	54



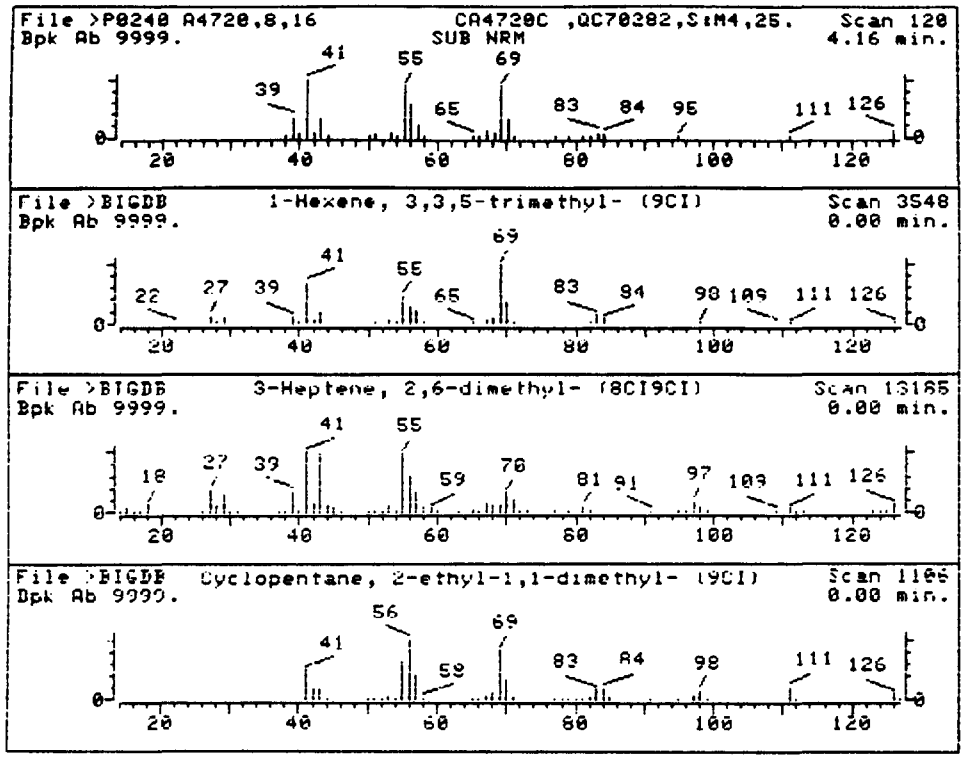
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 2.62
Scan: 44
Area: 225280 Rank: 15
Semi-quantitative Conc (uncorrected): 20.36 UG/ML
Semi-quantitative Conc (corrected): 796.39 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	2-Hexanone, 4-hydroxy-5-methyl-3-propyl- (9CI)	172	C10H20O2
2.	2-Propanone (9CI)	58	C3H6O
3.	1-Propen-2-ol, acetate (8CI9CI)	100	C5H8O2

Sample file: >P0240 Spectrum #: 44
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60	61141740	4159	"BIGDB	47	41	2	0	70	11	30	16
2.	44*	67641	1231	"BIGDB	21	50	0	0	88	24	17	15
3.	43*	108225	1374	"BIGDB	23	51	1	0	71	24	17	14



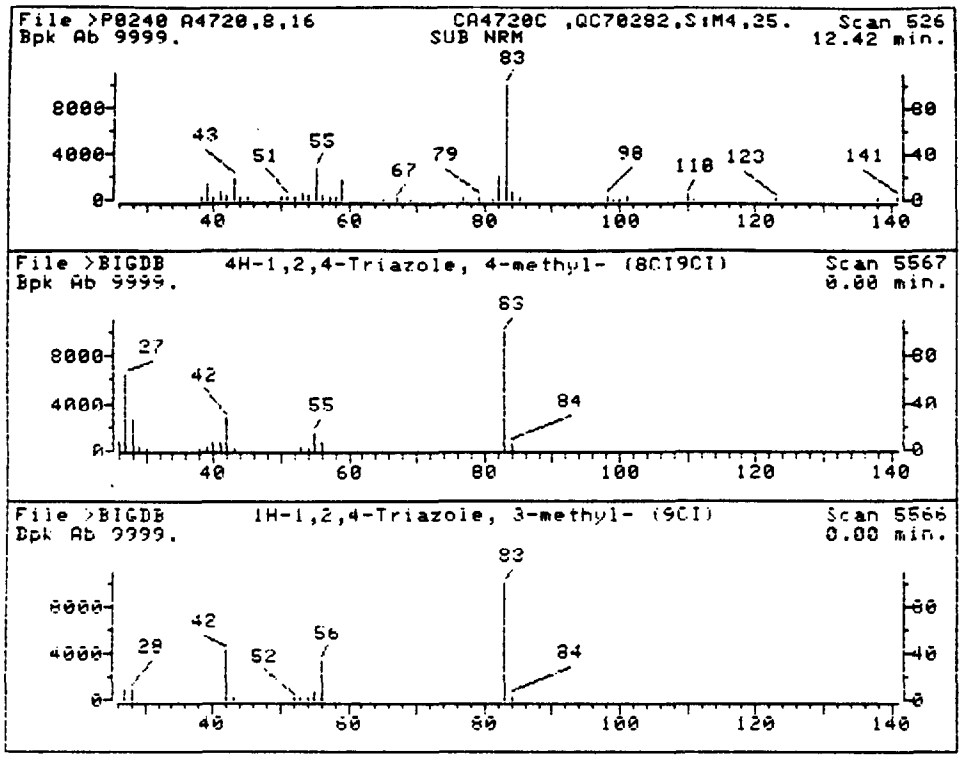
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 4.16
Scan: 120
Area: 215254 Rank: 16
Semi-quantitative Conc (uncorrected): 19.45 UG/ML
Semi-quantitative Conc (corrected): 760.95 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	1-Hexene, 3,3,5-trimethyl- (9CI)	126	C9H18
2.	3-Heptene, 2,6-dimethyl- (8CI9CI)	126	C9H18
3.	Cyclopentane, 2-ethyl-1,1-dimethyl- (9CI)	126	C9H18

Sample File: >P0240 Spectrum #: 120
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	40*	13422435	3548	"BIGDB	45	48	1	0	65	36	14	27
2.	27*	2738183	13185	"BIGDB	44	61	3	0	91	39	10	13
3.	25*	54549803	1106	"BIGDB	27	82	3	0	57	46	7	13

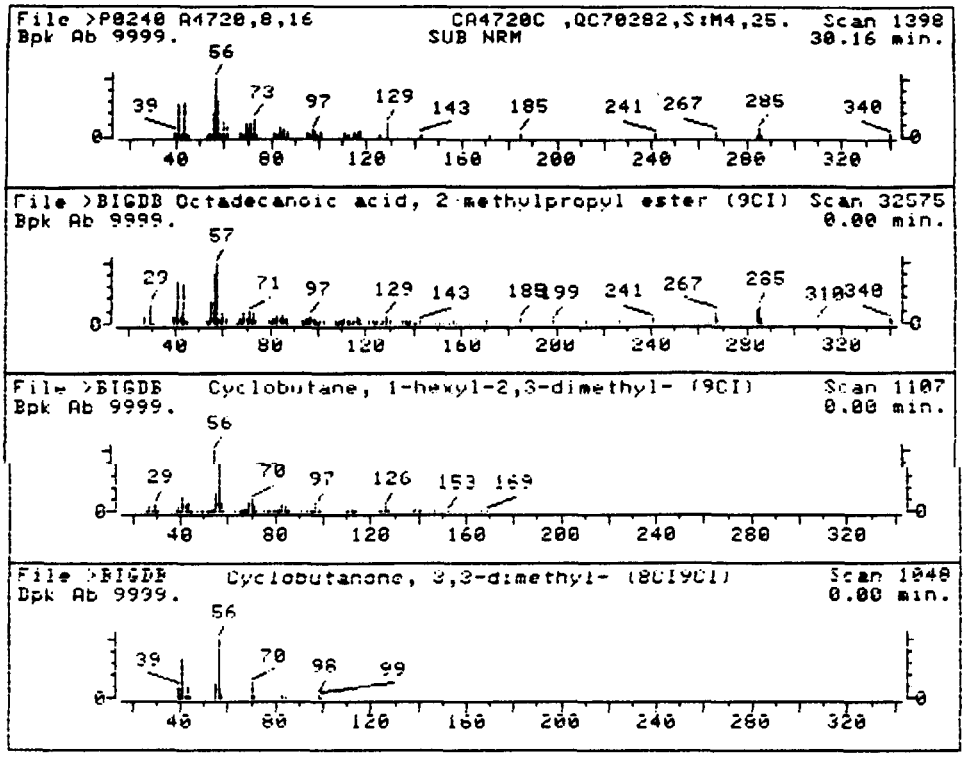


Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 12.42
Scan: 526
Area: 109288 Rank: 17
Semi-quantitative Conc (uncorrected): 6.70 UG/ML
Semi-quantitative Conc (corrected): 262.21 ug/kg
Calculated using Istd: d8-Naphthalene @ 13.08 minutes

#ru,PRE ,,PBR183,,,1,3
1. 4H-1,2,4-Triazole, 4-methyl- (8CI9CI) 83 C3H5N3
2. 1H-1,2,4-Triazole, 3-methyl- (9CI) 83 C3H5N3

Sample File: >P0240 Spectrum #: 526
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	28*	105211408	5567	"BIGDB	29	46	2	0	100	32	10	14
2.	22*	2170016	5566	"BIGDB	21	34	2	0	100	32	10	13



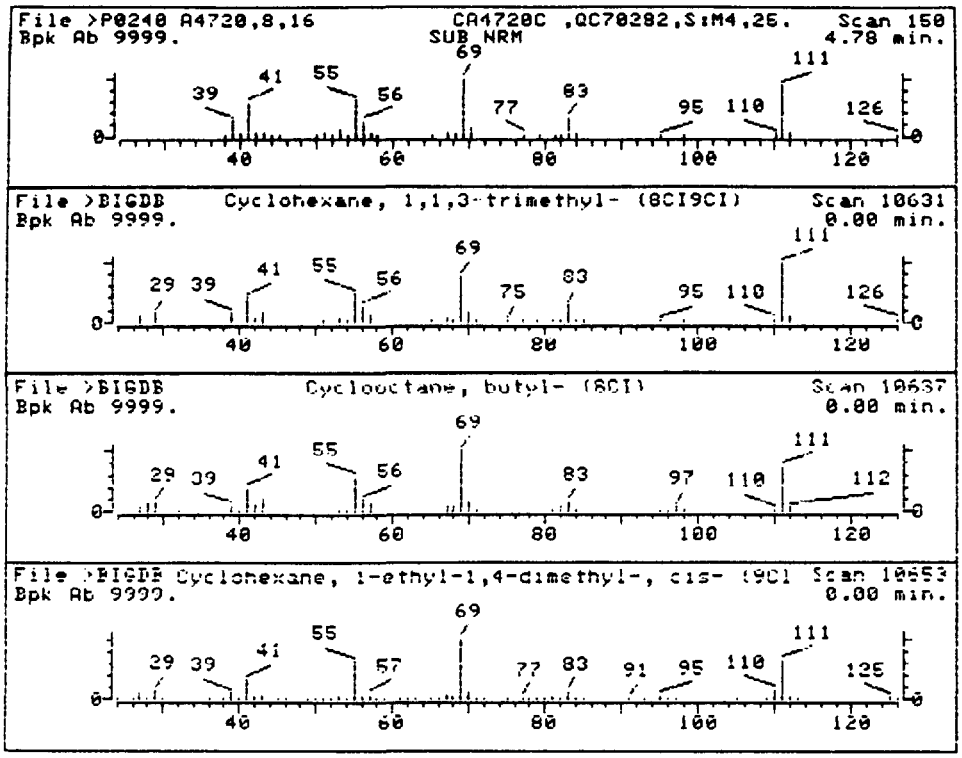
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 30.16
Scan: 1398
Area: 106898 Rank: 18
Semi-quantitative Conc (uncorrected): 9.55 UG/ML
Semi-quantitative Conc (corrected): 373.53 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Octadecanoic acid, 2-methylpropyl ester (9CI)	340	C22H44O2
2.	Cyclobutane, 1-hexyl-2,3-dimethyl- (9CI)	168	C12H24
3.	Cyclobutanone, 3,3-dimethyl- (8CI9CI)	98	C6H10O

Sample file: >P0240 Spectrum #: 1398
Search speed: 1 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	38*	646139	32575	"BIGDB	79	79	2	0	52	54	11	60
2.	25	55170848	1107	"BIGDB	40	48	1	0	91	50	7	14
3.	25*	1192332	1048	"BIGDB	33	45	2	0	79	50	7	16



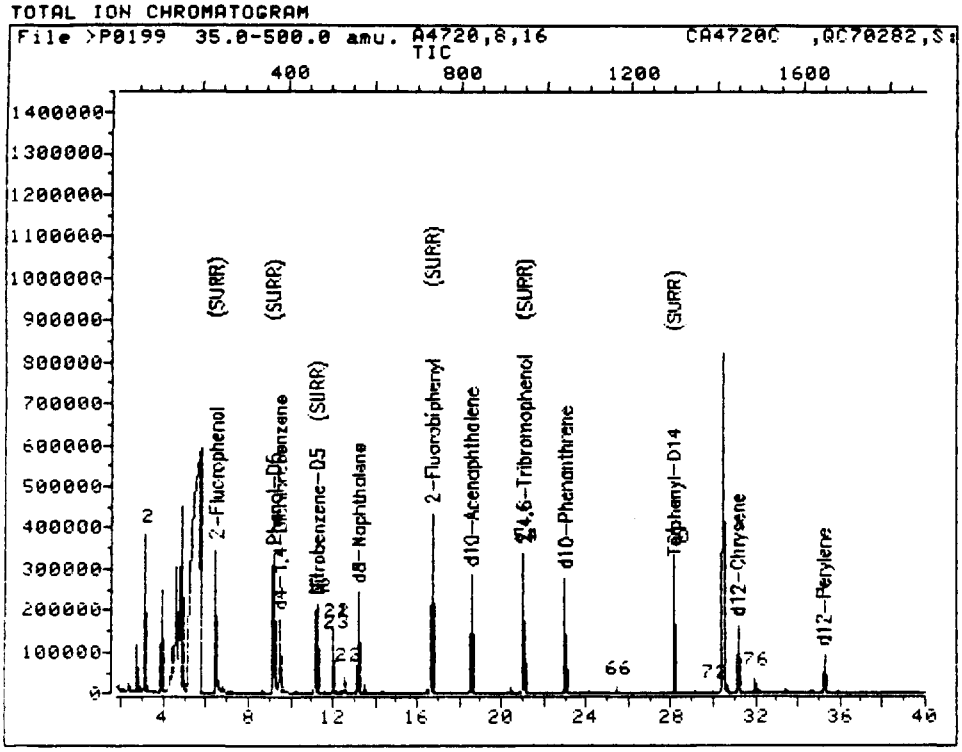
Data File: >P0240::U5
Name: A4720,8,16
Misc Data: CA4720C ,QC70282,S:M4,25.56,1 BTL#20
RT (min): 4.78
Scan: 150
Area: 103613 Rank: 19
Semi-quantitative Conc (uncorrected): 9.36 UG/ML
Semi-quantitative Conc (corrected): 366.28 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRF ,,PBR183,,,1,3
1. Cyclohexane, 1,1,3-trimethyl- (8CI9CI) 126 C9H18
2. Cyclooctane, butyl- (8CI) 168 C12H24
3. Cyclohexane, 1-ethyl-1,4-dimethyl-, cis- (9CI) 140 C10H20

Sample File: >P0240 Spectrum #: 150
Search speed: 1 Tilting option: S No. of ion ranges searched: 42

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	3073663	10631	"BIGDB	80	19	2	0	88	2	66	66
2.	70	16538935	10637	"BIGDB	47	48	2	0	88	9	42	12
3.	60	62238306	10653	"BIGDB	47	48	2	0	100	13	30	12

TOTAL ION CHROMATOGRAM



Data File: >P0199::U5 Quant Output File: ^P0199::VL
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.21,1 BTL# 9

Id File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

Operator ID: KV0786
Quant Time: 901019 16:07
Injected at: 901017 19:03

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901019 16:07
Output File: ^P0199::VL Injected at: 901017 19:03
Data File: >P0199::U5 Dilution Factor: 1.00000
Name: A4720,8,16
Misc: CA4720C ,QC70282,S:M4,25.21,1 BTL# 9

ID File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.45	379	132412	40.00	UG/ML	91
2)	N-Nitrosodimethylamine		3.12	68	5566	~~4.24~~	~~UG/ML~~	100
3)	2-Fluorophenol	(SURR)	6.42	230	351247	174.16	UG/ML	85
5)	Phenol-D5	(SURR)	9.17	365	579932	227.12	UG/ML	91
12)	N-Nitrosodi-n-propylamine		11.20	465	39670	~~21.50~~	~~UG/ML~~	38
18)	*d8-Naphthalene		13.17	562	340894	40.00	UG/ML	95
20)	Nitrobenzene-D5	(SURR)	11.20	465	264528	80.12	UG/ML	89
21)	Nitrobenzene		11.99	504	5780	~~1.15~~	~~UG/ML~~	71
22)	Isophorone		11.99	504	189502	28.73	UG/ML	95
22)	Isophorone		12.52	530	9166	~~1.39~~	~~UG/ML~~	86
23)	2-Nitrophenol		11.97	503	3280	~~1.78~~	~~UG/ML~~	57
35)	*d10-Acenaphthalene		18.52	825	214588	40.00	UG/ML	99
39)	2-Fluorobiphenyl	(SURR)	16.67	734	499389	74.23	UG/ML	98
54)	Fluorene		21.02	948	8754	~~1.48~~	~~UG/ML~~	86
56)	2,4,6-Tribromophenol	(SURR)	21.02	948	131980	191.16	UG/ML	97
58)	*d10-Phenanthrene		22.98	1044	309700	40.00	UG/ML	98
66)	Di-n-butyl phthalate		25.40	1163	19831	~~1.94~~	~~UG/ML~~	99
69)	*d12-Chrysene		31.13	1445	176413	40.00	UG/ML	97
70)	Benzidine		28.14	1298	5017	~~4.26~~	~~UG/ML~~	100
71)	Terphenyl-D14	(SURR)	28.12	1297	446076	81.33	UG/ML	92
72)	Butyl benzyl phthalate		29.91	1385	2394	~~.579~~	~~UG/ML~~	93
6)	bis(2-Ethylhexyl)phthalate		31.90	1483	27506	5.35	UG/ML	98
77)	*d12-Perylene		35.20	1645	102090	40.00	UG/ML	98

* Compound is ISTD

CA
10 SC 90

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721C

Sample wt/vol: ~~25.6~~ 30 (g/mL) G Lab File ID: >P0239

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 815 dec. 15 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: ~~32767~~ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1390	U
111-44-4	bis(2-Chloroethyl)ether	1390	U
95-57-8	2-Chlorophenol	1390	U
541-73-1	1,3-Dichlorobenzene	1390	U
106-46-7	1,4-Dichlorobenzene	1390	U
100-51-6	Benzyl alcohol	1390	U
95-50-1	1,2-Dichlorobenzene	1390	U
95-48-7	2-Methylphenol	1390	U
108-60-1	bis(2-Chloroisopropyl)ether	1390	U
106-44-5	4-Methylphenol	1390	U
621-64-7	N-Nitroso-di-n-propylamine	1390	U
67-72-1	Hexachloroethane	1390	U
98-95-3	Nitrobenzene	1390	U
78-59-1	Isophorone	1910	B
88-75-5	2-Nitrophenol	1390	U
105-67-9	2,4-Dimethylphenol	1390	U
65-85-0	Benzoic acid	12000	U
111-91-1	bis(2-Chloroethoxy)methane	1390	U
120-83-2	2,4-Dichlorophenol	1390	U
120-82-1	1,2,4-Trichlorobenzene	1390	U
91-20-3	Naphthalene	1390	U
106-47-8	4-Chloroaniline	1390	U
87-68-3	Hexachlorobutadiene	1390	U
59-50-7	4-Chloro-3-methylphenol	1390	U
91-57-6	2-Methylnaphthalene	1390	U
77-47-4	Hexachlorocyclopentadiene	1390	U
88-06-2	2,4,6-Trichlorophenol	1390	U
95-95-4	2,4,5-Trichlorophenol	12000	U
91-58-7	2-Chloronaphthalene	1390	U
88-74-4	2-Nitroaniline	12000	U
131-11-3	Dimethylphthalate	1390	U
208-96-8	Acenaphthylene	1390	U
606-20-2	2,6-Dinitrotoluene	1390	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4721

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721C

Sample wt/vol: ~~25.6~~ 30 (g/mL) G Lab File ID: >P0239

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 8 15 dec. 15 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: ~~32767~~ 1

CA 10-30-90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	390	U
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	2000	U
132-64-9	Dibenzofuran	390	U
121-14-2	2,4-Dinitrotoluene	390	U
84-66-2	Diethylphthalate	390	U
7005-72-3	4-Chlorophenyl-phenylether	390	U
86-73-7	Fluorene	390	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	390	U
101-55-3	4-Bromophenyl-phenylether	390	U
118-74-1	Hexachlorobenzene	390	U
87-86-5	Pentachlorophenol	2000	U
85-01-8	Phenanthrene	390	U
120-12-7	Anthracene	390	U
84-74-2	Di-n-butylphthalate	390	U
206-44-0	Fluoranthene	390	U
129-00-0	Pyrene	390	U
85-68-7	Butylbenzylphthalate	390	U
91-94-1	3,3'-Dichlorobenzidine	780	U
56-55-3	Benzo(a)anthracene	390	U
218-01-9	Chrysene	390	U
117-81-7	bis(2-Ethylhexyl)phthalate	140	J
117-84-0	Di-n-octylphthalate	390	U
205-99-2	Benzo(b)fluoranthene	390	U
207-08-9	Benzo(k)fluoranthene	390	U
50-32-8	Benzo(a)pyrene	390	U
193-39-5	Indeno(1,2,3-cd)pyrene	390	U
53-70-3	Dibenz(a,h)anthracene	390	U
191-24-2	Benzo(g,h,i)perylene	390	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
A4721

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4721C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >P0239

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 15 dec. Date Extracted: 10/11/90

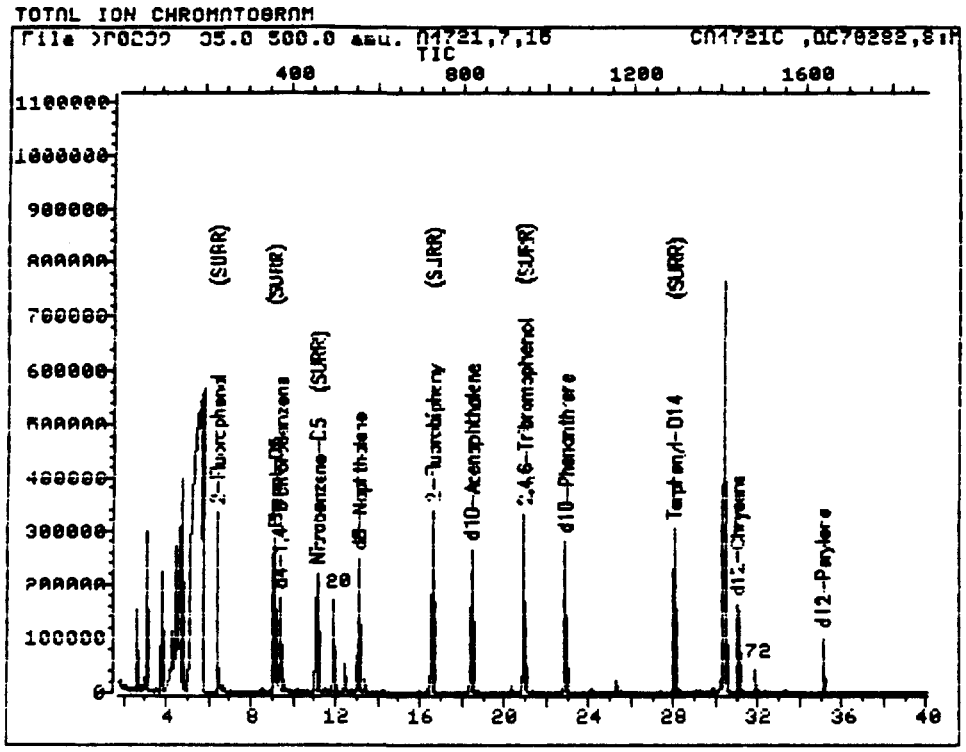
Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7 Dilution Factor: 1.0

Number TICs found: 11

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.		Aldol Condensate	5.69	55000	BJ
02.	4337-65-9	Hexanedioic acid, mono(2-eth	30.36	11000	BJ
03.		Unknown Alkane	4.69	7700	BJ
04.		Unknown Alkane	4.49	5300	BJ
05.	108-88-3	Benzene, methyl- (9CI)	3.05	3700	BJ
06.		Aldol Condensate	3.80	2700	BJ
07.	54549-80-3	Cyclopentane, 2-ethyl-1,1-di	4.25	2300	BJ
08.	108-10-1	2-Pentanone, 4-methyl- (8CI9	2.62	710	BJ
09.	10570-40-8	4H-1,2,4-Triazole, 4-methyl-	12.42	250	J
10.	3073-66-3	Cyclohexane, 1,1,3-trimethyl	4.78	280	BJ
11.	55170-84-8	Cyclobutane,1-hexyl-2,3-dim	30.16	240	BJ



Data File: >P0239::U6 Quant Output File: ^P0239::AQ
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL#19

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

Operator ID: KV0786
Quant Time : 901025 12:58
Injected at: 901020 04:13

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901025 12:58
Output File: ^P0239::AQ Injected at: 901020 04:13
Data File: >P0239::U6 Dilution Factor: 1.00000
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL#19

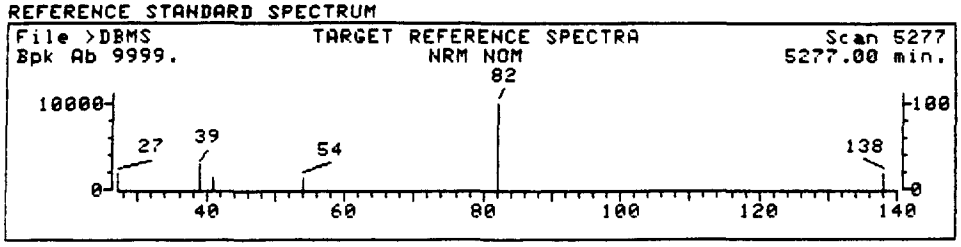
ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.33	374	80982	40.00	UG/ML	90
3)	2-Fluorophenol	(SURR)	6.36	228	299528	133.33	UG/ML	94
5)	Phenol-D5	(SURR)	9.07	361	493559	174.70	UG/ML	97
17)	*d8-Naphthalene		13.08	558	334988	40.00	UG/ML	95
18)	Nitrobenzene-D5	(SURR)	11.10	461	260385	63.95	UG/ML	89
20)	Isophorone		11.90	500	196317	23.37	UG/ML	95
32)	*d10-Acenaphthalene		18.42	821	184577	40.00	UG/ML	97
36)	2-Fluorobiphenyl	(SURR)	16.57	730	392738	67.36	UG/ML	98
52)	2,4,6-Tribromophenol	(SURR)	20.93	944	161706	156.42	UG/ML	99
54)	*d10-Phenanthrene		22.88	1040	322610	40.00	UG/ML	98
65)	*d12-Chrysene		31.01	1440	201378	40.00	UG/ML	99
67)	Terphenyl-D14	(SURR)	28.02	1293	451950	59.70	UG/ML	94
72)	bis(2-Ethylhexyl)phthalate		31.81	1479	24356	3.62	UG/ML	98
73)	*d12-Perylene		35.08	1640	126589	40.00	UG/ML	90

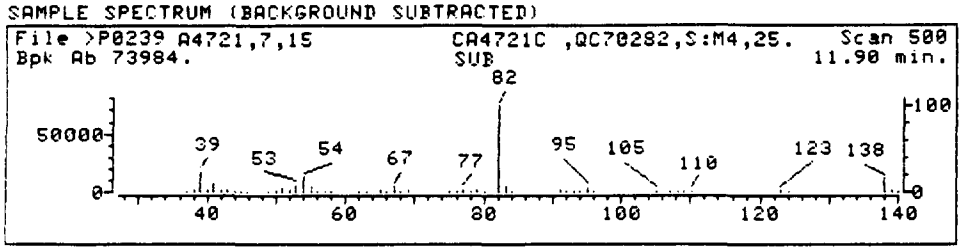
* Compound is ISTD

10-26 48.

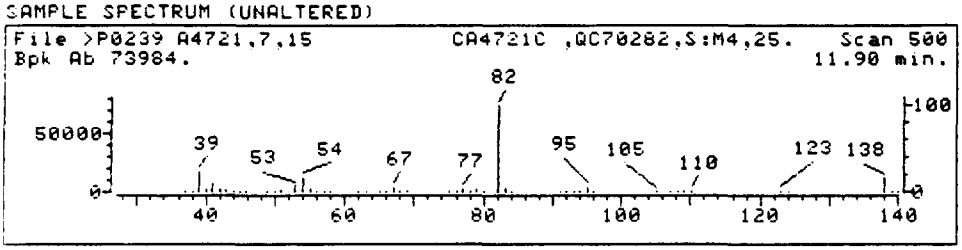
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



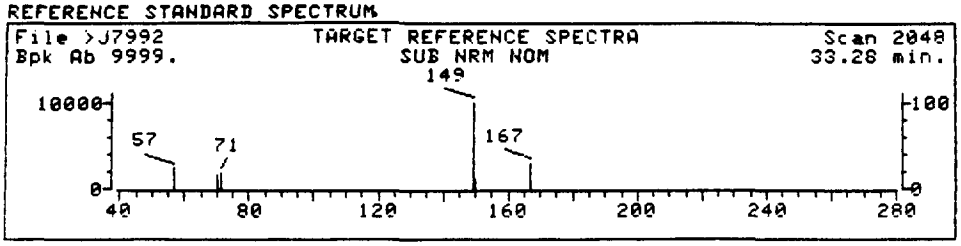
SAMPLE SPECTRUM (UNALTERED)



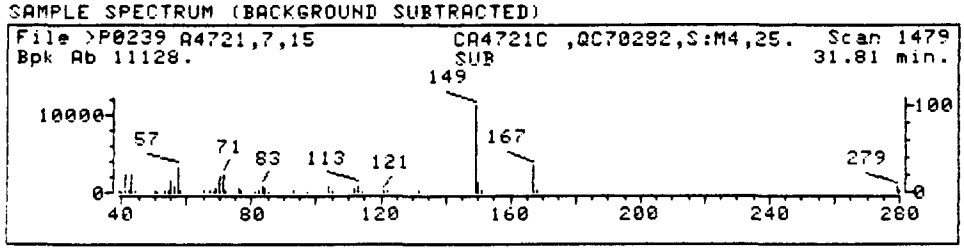
Data File: >P0239::U6 Quant Output File: ^P0239::AQ
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
Quant Time: 901025 12:58 Quant ID File: IP0092::PF
Injected at: 901020 04:13 Last Calibration: 901022 14:02
Last Qcal Time: 901020 01:47

Compound No : 20
Compound Name : Isophorone
Scan Number : 500
Retention Time: 11.90 min.
Quant Ion : 82.0
Area : 196317
Concentration : 23.37 UG/ML
q-value : 95

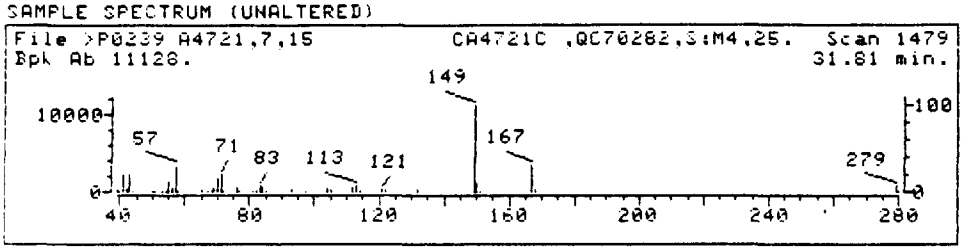
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

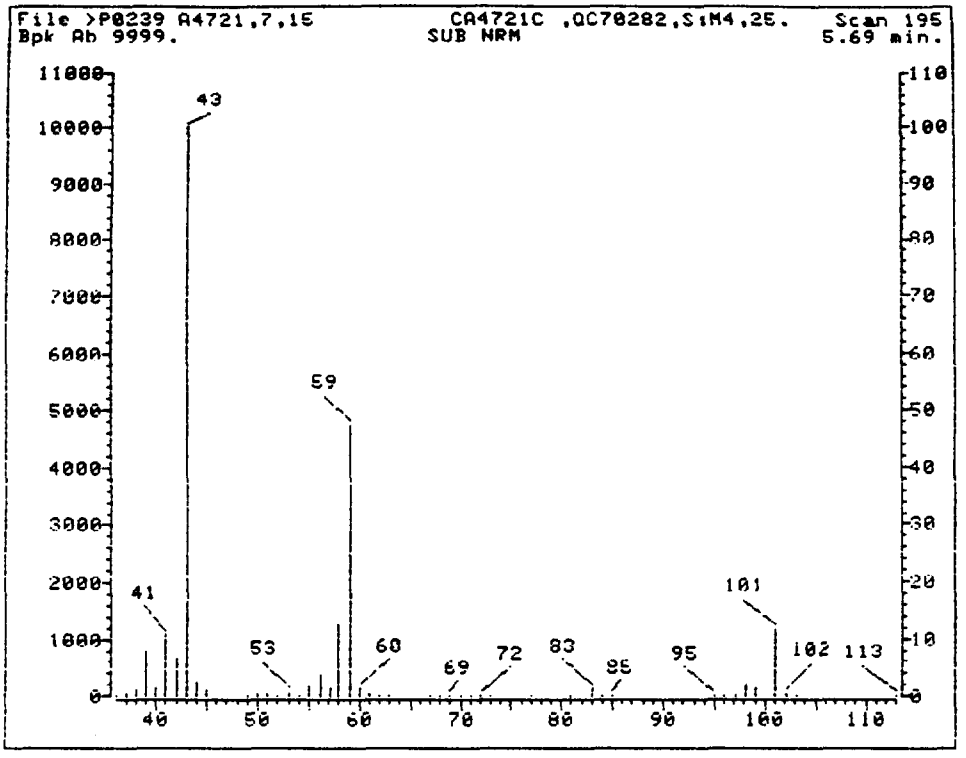


SAMPLE SPECTRUM (UNALTERED)



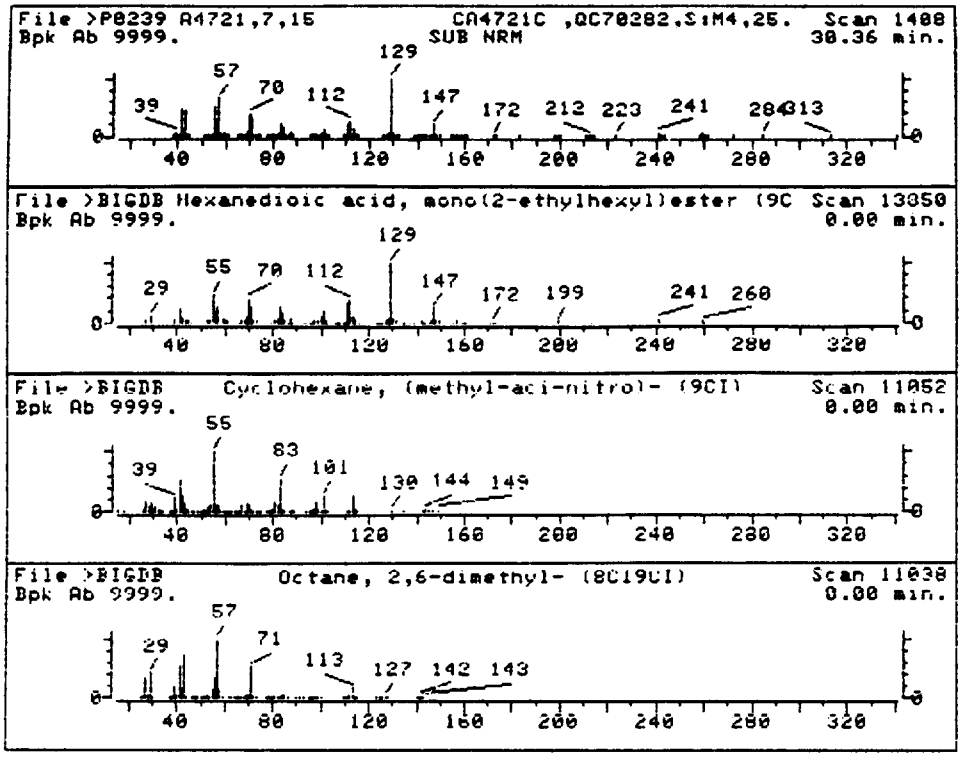
Data File: >P0239::U6 Quant Output File: ^P0239::AQ
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
Quant Time: 901025 12:58 Quant ID File: IP0092::PF
Injected at: 901020 04:13 Last Calibration: 901022 14:02
Last Qcal Time: 901020 01:47

Compound No : 72
Compound Name : bis(2-Ethylhexyl)phthalate
Scan Number : 1479
Retention Time: 31.81 min.
Quant Ion : 149.0
Area : 24356
Concentration : 3.62 UG/ML
q-value : 98



Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 5.69
Scan: 195
Area: 17558759 Rank: 1
Semi-quantitative Conc (uncorrected): 1398.55 UG/ML
Semi-quantitative Conc (corrected): 54716.23 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

No PBM hits for this scan.



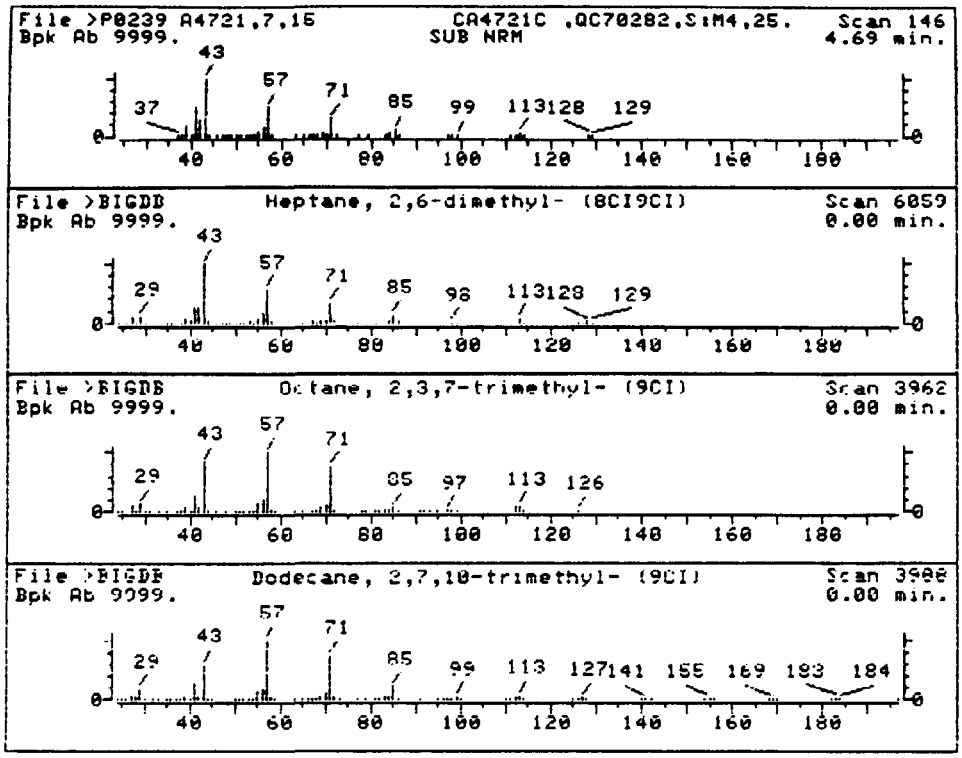
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 30.36
Scan: 1408
Area: 3942283 Rank: 2
Semi-quantitative Conc (uncorrected): 278.50 UG/ML
Semi-quantitative Conc (corrected): 10896.12 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Hexanedioic acid, mono(2-ethylhexyl)ester (9CI)	258	C14H26O4
2.	Cyclohexane, (methyl-aci-nitro)- (9CI)	143	C7H13NO2
3.	Octane, 2,6-dimethyl- (8CI9CI)	142	C10H22

Sample file: >P0239 Spectrum #: 1408
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	71	4332659	13850	"BIGDB	90	55	0	0	61	30	29	66
2.	31*	55932978	11052	"BIGDB	46	46	2	1	30	43	8	19
3.	27*	2051301	11038	"BIGDB	43	37	2	2	35	43	8	15



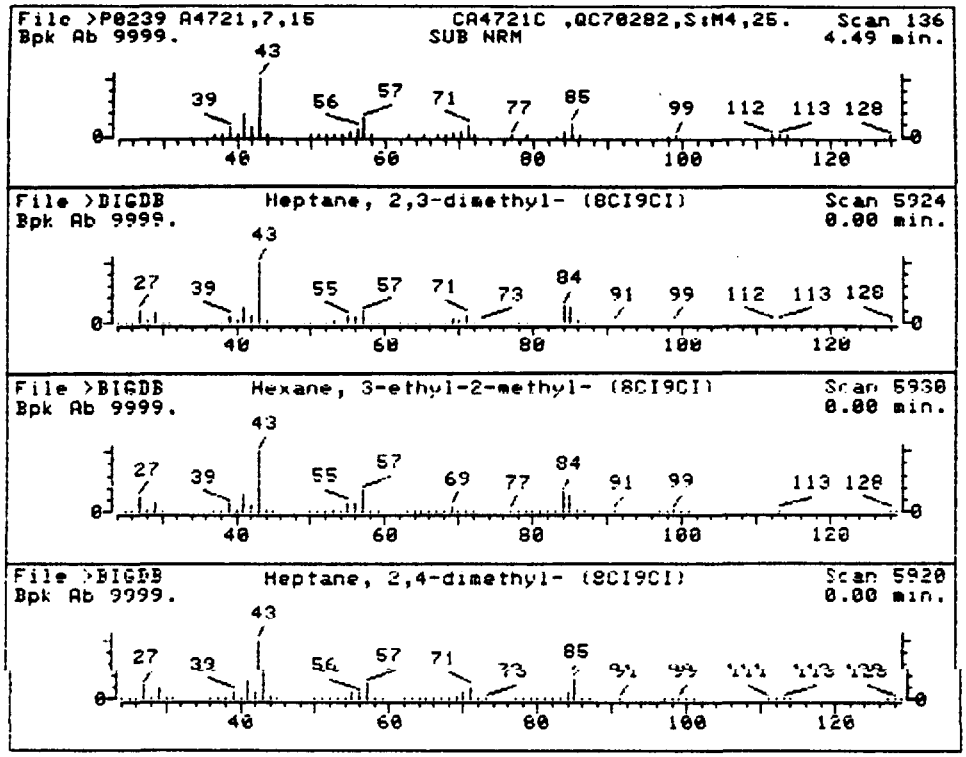
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 4.69
Scan: 146
Area: 2480610 Rank: 3
Semi-quantitative Conc (uncorrected): 197.58 UG/ML
Semi-quantitative Conc (corrected): 7730.03 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,6-dimethyl- (8CI9CI)	128 C9H20
2.	Octane, 2,3,7-trimethyl- (9CI)	156 C11H24
3.	Dodecane, 2,7,10-trimethyl- (9CI)	212 C15H32

Sample File: >P0239 Spectrum #: 146
Search speed: 1 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	1072055	6059	"BIGDB	74	18	1	0	78	2	66	77
2.	70	62016346	3962	"BIGDB	36	42	2	0	39	10	42	12
3.	70	74645980	3988	"BIGDB	42	49	2	0	40	7	42	12



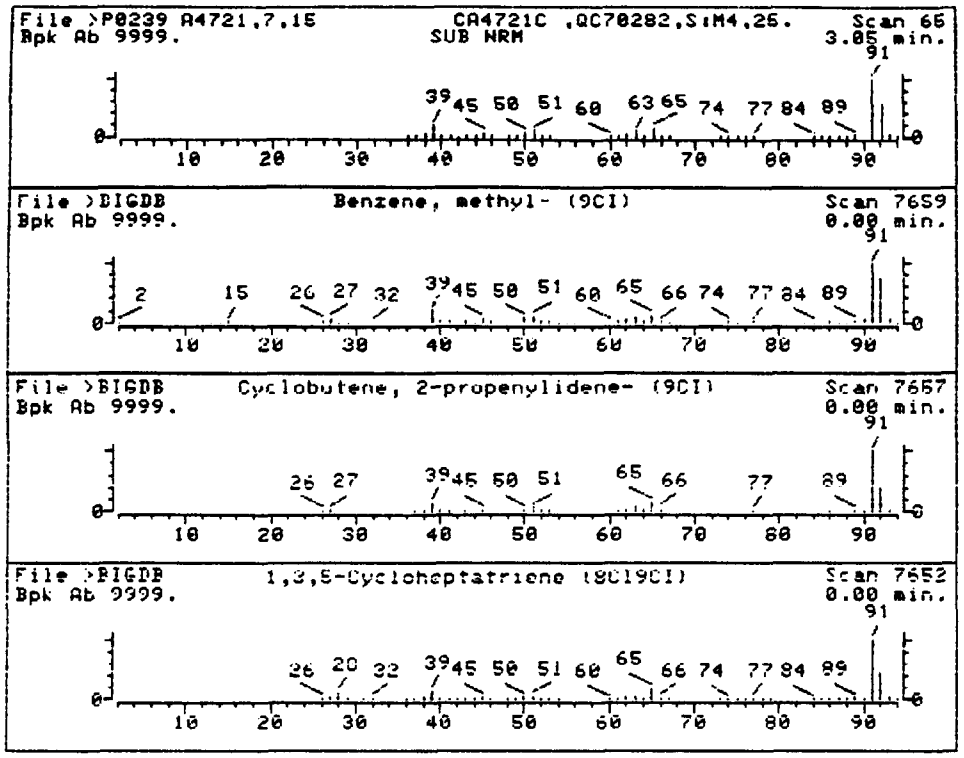
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 4.49
Scan: 136
Area: 1702809 Rank: 4
Semi-quantitative Conc (uncorrected): 135.63 UG/ML
Semi-quantitative Conc (corrected): 5316.26 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,3-dimethyl- (8CI9CI)	128 C9H20
2.	Hexane, 3-ethyl-2-methyl- (8CI9CI)	128 C9H20
3.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20

Sample file: >P0239 Spectrum #: 136
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	81*	3074713	5924	"BIGDB	52	39	1	0	74	8	53	40
2.	70*	16789461	5930	"BIGDB	36	51	2	0	84	8	42	18
3.	69*	2213232	5920	"BIGDB	56	36	0	0	62	32	26	67



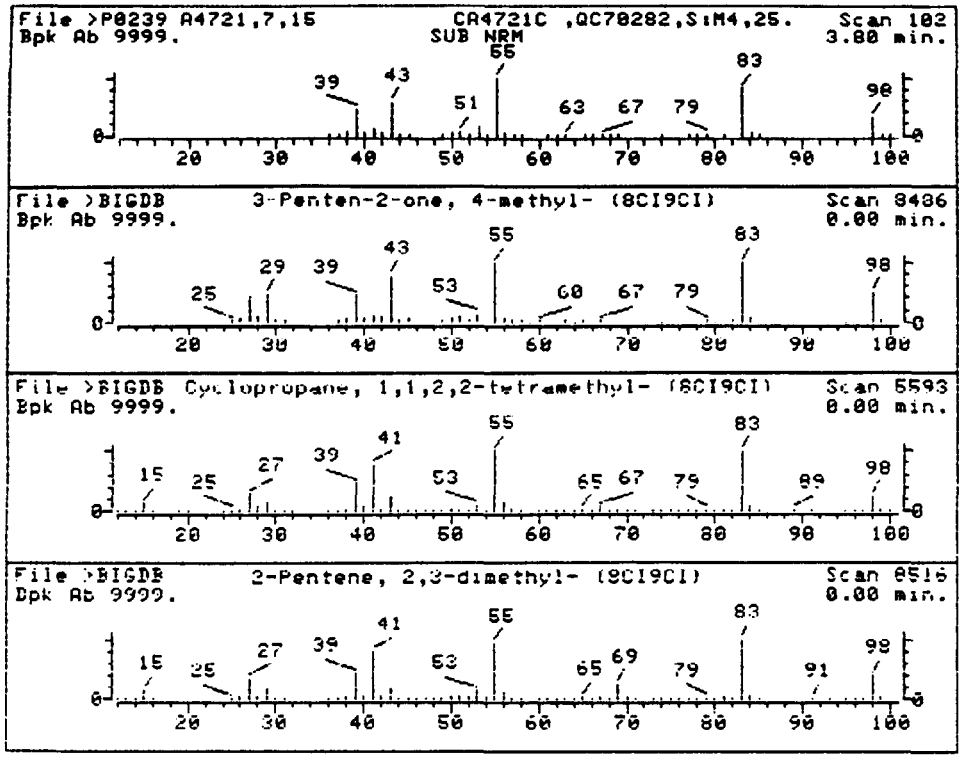
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 3.05
Scan: 65
Area: 1191541 Rank: 9
Semi-quantitative Conc (uncorrected): 94.91 UG/ML
Semi-quantitative Conc (corrected): 3713.06 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Benzene, methyl- (9CI)	92 C7H8
2.	Cyclobutene, 2-propenylidene- (9CI)	92 C7H8
3.	1,3,5-Cycloheptatriene (8CI9CI)	92 C7H8

Sample File: >P0239 Spectrum #: 65
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	108883	7659	"BIGDB	75	15	1	0	76	3	68	89
2.	79*	52097855	7657	"BIGDB	51	28	2	0	98	6	48	33
3.	71*	544252	7652	"BIGDB	55	30	2	2	68	13	38	34



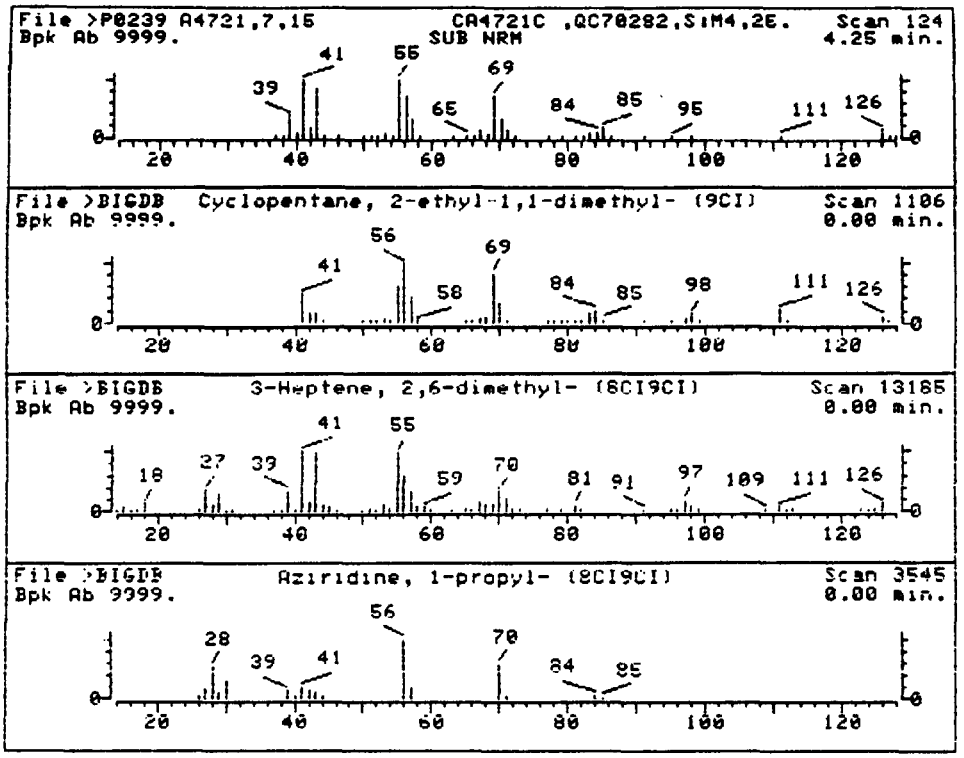
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 3.80
Scan: 102
Area: 859225 Rank: 11
Semi-quantitative Conc (uncorrected): 68.44 UG/ML
Semi-quantitative Conc (corrected): 267.50 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	3-Penten-2-one, 4-methyl- (8CI9CI)	98 C6H10O
2.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI9CI)	98 C7H14
3.	2-Pentene, 2,3-dimethyl- (8CI9CI)	98 C7H14

Sample File: >P0239 Spectrum #: 102
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	87*	141797	8486	"BIGDB	79	19	3	1	71	2	63	46
2.	78*	4127423	5593	"BIGDB	43	54	2	0	84	5	55	19
3.	78*	10574375	8516	"BIGDB	40	61	3	0	82	5	55	13



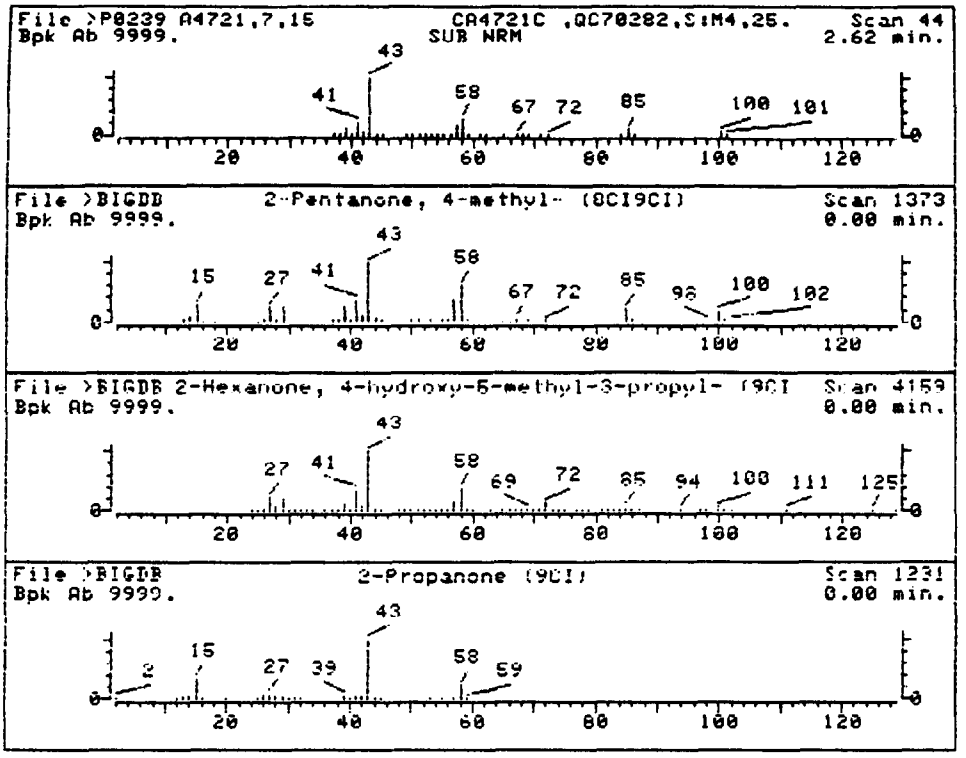
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 4.25
Scan: 124
Area: 749077 Rank: 13
Semi-quantitative Conc (uncorrected): 59.66 UG/ML
Semi-quantitative Conc (corrected): 2334.26 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Cyclopentane, 2-ethyl-1,1-dimethyl- (9CI)	126	C9H18
2.	3-Heptene, 2,6-dimethyl- (8CI9CI)	126	C9H18
3.	Aziridine, 1-propyl- (8CI9CI)	85	C5H11N

Sample file: >P0239 Spectrum #: 124
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CUN #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	43*	54549803	1106	"BIGDB	51	58	3	0	71	22	17	14
2.	36*	2738183	13185	"BIGDB	37	68	3	0	97	28	14	13
3.	33*	5536981	3545	"BIGDB	27	60	0	0	57	37	10	19



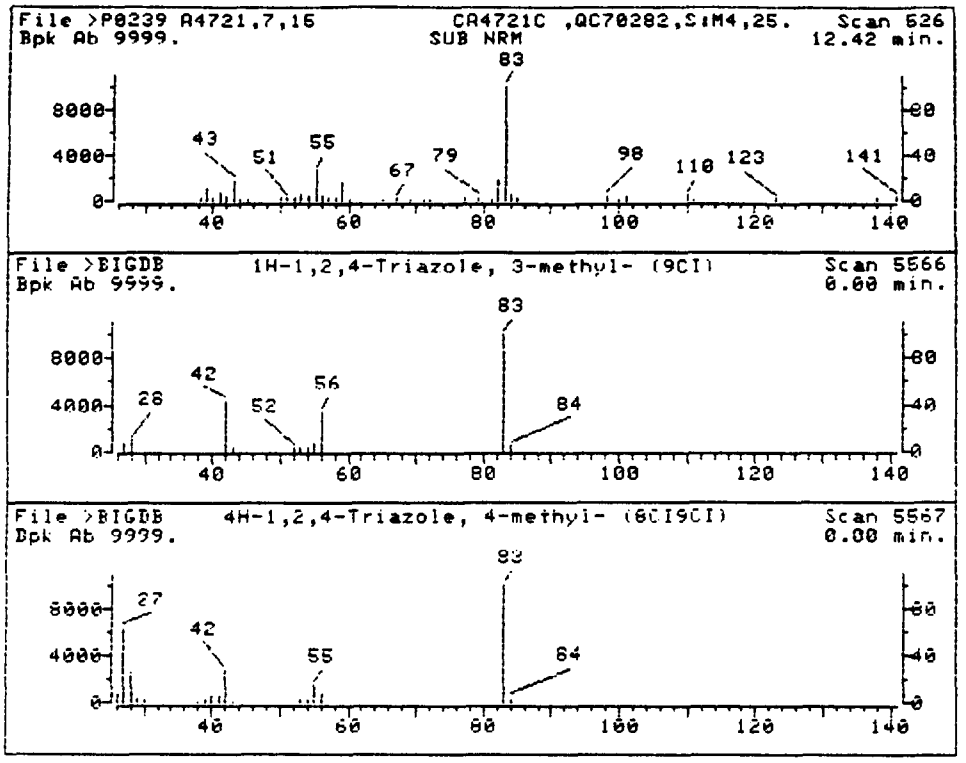
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BIL#19
RT (min): 2.62
Scan: 44
Area: 226785 Rank: 15
Semi-quantitative Conc (uncorrected): 18.06 UG/ML
Semi-quantitative Conc (corrected): 706.70 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	2-Pentanone, 4-methyl- (8CI9CI)	100 C6H12O
2.	2-Hexanone, 4-hydroxy-5-methyl-3-propyl- (9CI)	172 C10H20O2
3.	2-Propanone (9CI)	58 C3H6O

Sample File: >P0239 Spectrum #: 44
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CUN #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	71*	108101	1373	"BIGDB	57	23	0	0	36	43	24	28
2.	60	61141740	4159	"BIGDB	47	41	2	0	68	12	30	16
3.	44*	67641	1231	"BIGDB	21	50	0	0	86	25	17	15

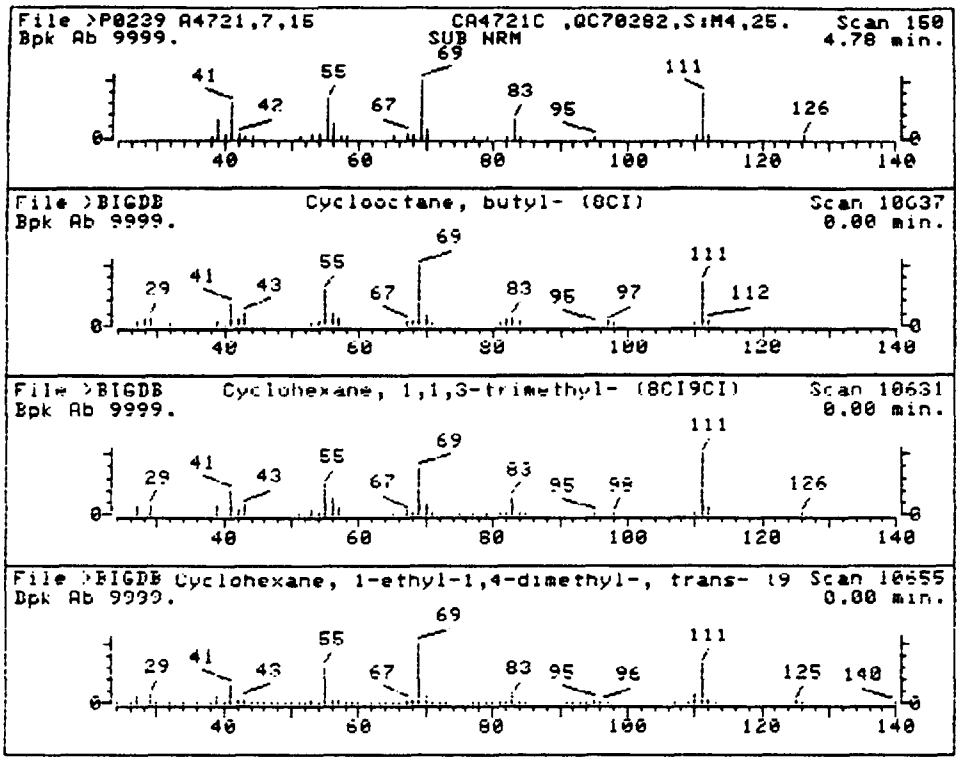


Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 12.42
Scan: 526
Area: 119271 Rank: 16
Semi-quantitative Conc (uncorrected): 6.45 UG/ML
Semi-quantitative Conc (corrected): 252.33 ug/kg
Calculated using Istd: d8-Naphthalene @ 13.08 minutes

#ru,PRE ,,PBR183,,,1,3
1. 1H-1,2,4-Triazole, 3-methyl- (9CI) 83 C3H5N3
2. 4H-1,2,4-Triazole, 4-methyl- (8CI9CI) 83 C3H5N3

Sample file: >P0239 Spectrum #: 526
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	31*	7170016	5566	"BIGDB	21	34	1	0	100	32	12	14
2.	31*	10570408	5567	"BIGDB	29	46	2	0	100	32	12	14



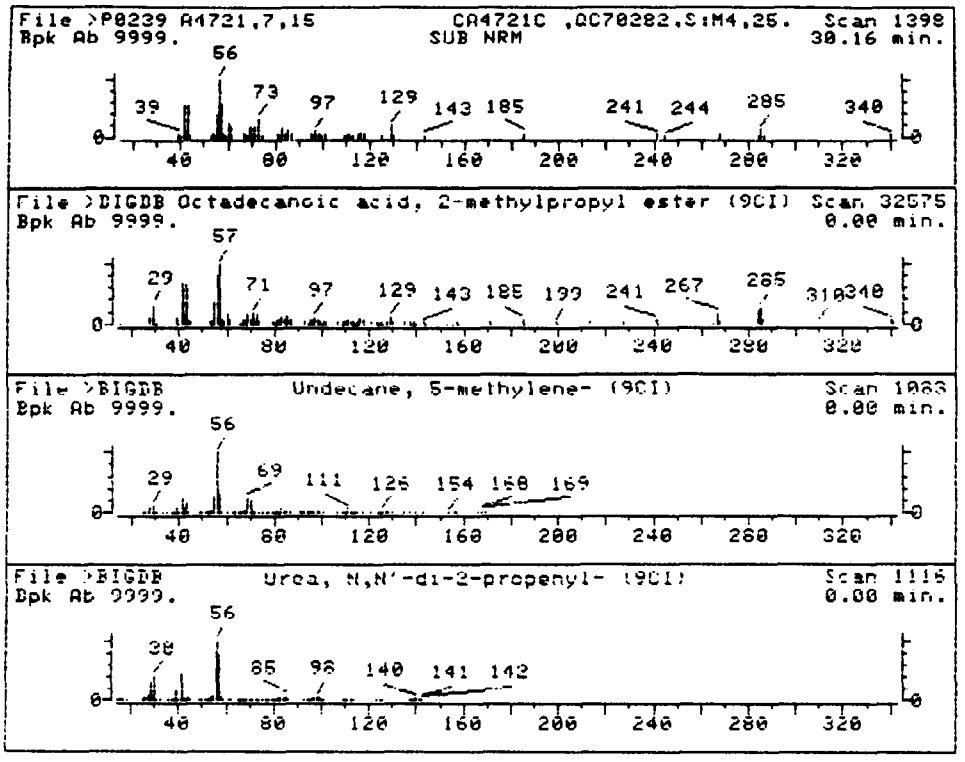
Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 4.78
Scan: 150
Area: 89176 Rank: 17
Semi-quantitative Conc (uncorrected): 7.10 UG/ML
Semi-quantitative Conc (corrected): 277.89 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Cyclooctane, butyl- (8CI)	168	C12H24
2.	Cyclohexane, 1,1,3-trimethyl- (8CI9CI)	126	C9H18
3.	Cyclohexane, 1-ethyl-1,4-dimethyl-, trans- (9CI)	140	C10H20

Sample File: >P0239 Spectrum #: 150
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CUN #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	70	16538935	10637	"BIGDB	54	41	2	1	86	7	42	12
2.	58*	3073663	10631	"BIGDB	53	46	2	1	87	20	25	24
3.	52	62238328	10655	"BIGDB	46	49	2	0	100	17	20	12



Data File: >P0239::U6
Name: A4721,7,15
Misc Data: CA4721C ,QC70282,S:M4,25.56,1 BTL#19
RT (min): 30.16
Scan: 1398
Area: 88432 Rank: 18
Semi-quantitative Conc (uncorrected): 6.25 UG/ML
Semi-quantitative Conc (corrected): 244.42 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

#ru,PRE ,,PBR183,,,1,3

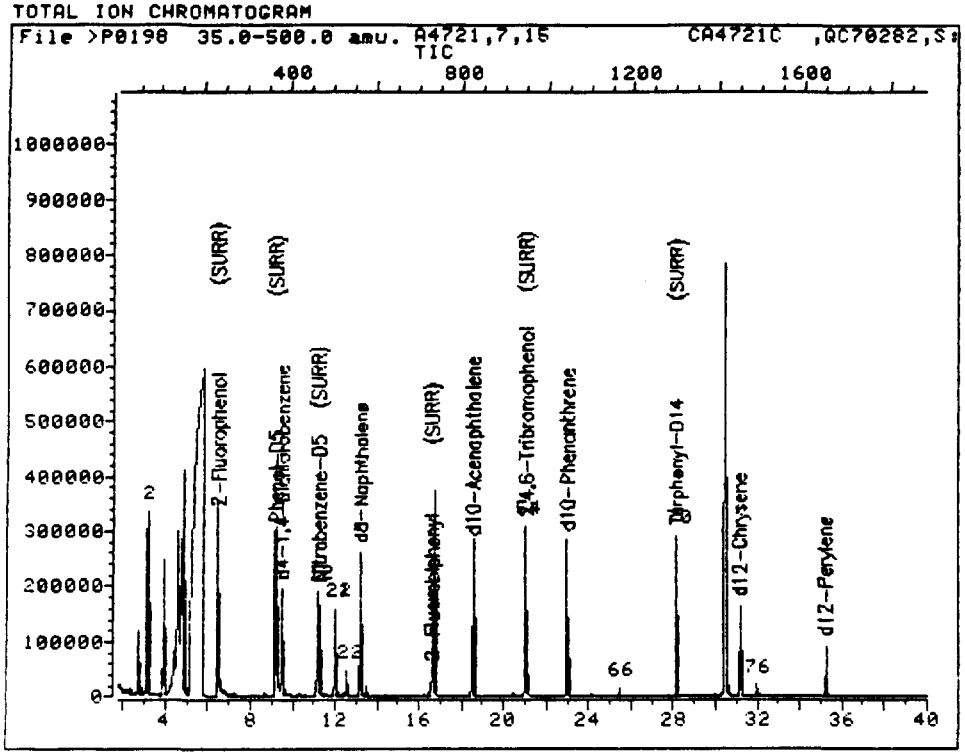
1.	Octadecanoic acid, 2-methylpropyl ester (9CI)	340 C22H44O2
2.	Undecane, 5-methylene- (9CI)	168 C12H24
3.	Urea, N,N'-di-2-propenyl- (9CI)	140 C7H12N2O

Sample File: >P0239 Spectrum #: 1398
Search speed: 1 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	36*	646139	32575	"BIGDB	73	85	2	0	52	53	10	55
2.	25	5698486	1083	"BIGDB	56	49	2	0	100	50	7	12
3.	25	1801725	1116	"BIGDB	38	52	1	0	69	50	7	14

STANDARDS DATA

TOTAL ION CHROMATOGRAM



Data File: >P0198::U5 Quant Output File: ^P0198::VL
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL# 8

Id File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

Operator ID: KV0786
Quant Time: 901019 16:05
Injected at: 901017 18:14

END OF PAGE INSERTION

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901019 16:05
Output File: ^P0198::VL Injected at: 901017 18:14
Data File: >P0198::U5 Dilution Factor: 1.00000
Name: A4721,7,15
Misc: CA4721C ,QC70282,S:M4,25.56,1 BTL# 8

ID File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.43	378	146726	40.00	UG/ML	90
2)	N-Nitrosodimethylamine		3.14	69	6156	~~4.23~~	~~UG/ML~~	100
3)	2-Fluorophenol	(SURR)	6.42	230	333885	149.40	UG/ML	83
5)	Phenol-D5	(SURR)	9.15	364	541825	191.50	UG/ML	92
12)	N-Nitrosodi-n-propylamine		11.18	464	36458	~~17.83~~	~~UG/ML~~	38
18)	*d8-Naphthalene		13.17	562	363941	40.00	UG/ML	94
20)	Nitrobenzene-D5	(SURR)	11.18	464	244038	69.24	UG/ML	93
21)	Nitrobenzene		11.99	504	5924	~~1.11~~	~~UG/ML~~	75
22)	Isophorone		11.99	504	198228	28.15	UG/ML	95
22)	Isophorone		12.52	530	8318	~~1.18~~	~~UG/ML~~	89
35)	*d10-Acenaphthalene		18.52	825	208010	40.00	UG/ML	95
39)	2-Fluorobiphenyl	(SURR)	16.57	729	41133	6.31	UG/ML	99
54)	Fluorene		21.02	948	7840	~~1.29~~	~~UG/ML~~	87
56)	2,4,6-Tribromophenol	(SURR)	21.02	948	109169	163.12	UG/ML	94
58)	*d10-Phenanthrene		22.98	1044	310400	40.00	UG/ML	98
66)	Di-n-butyl phthalate		25.40	1163	21436	~~2.18~~	~~UG/ML~~	95
69)	*d12-Chrysene		31.13	1445	177774	40.00	UG/ML	96
70)	Benzidine		28.12	1297	4256	~~3.58~~	~~UG/ML~~	100
71)	Terphenyl-D14	(SURR)	28.12	1297	361961	65.49	UG/ML	91
76)	bis(2-Ethylhexyl)phthalate		31.90	1483	18462	3.57	UG/ML	99
77)	*d12-Perylene		35.20	1645	106565	40.00	UG/ML	96

* Compound is ISTD

CA 10-30-90

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETCNJ Contract:_____

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

Instrument ID:GC/MS P Calibration Date(s) 10/19/90 10/19/90

Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>P0226 RRF50 =>P0225
RRF80 =>P0224 RRF120=>P0223 RRF160=>P0222

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol*	1.751	1.764	1.716	1.420	1.438	1.618	10.7*
bis(2-Chloroethyl)ether	1.714	1.758	1.262	1.422	1.502	1.531	13.5
2-Chlorophenol	1.371	1.407	1.346	1.298	1.265	1.337	4.2
1,3-Dichlorobenzene	1.521	1.588	1.393	1.354	1.307	1.432	8.2
1,4-Dichlorobenzene*	1.566	1.639	1.270	1.181	1.256	1.382	14.9*
Benzyl alcohol	1.242	1.464	1.281	1.338	1.354	1.336	6.3
1,2-Dichlorobenzene	1.697	1.759	1.480	1.418	1.448	1.561	10.0
2-Methylphenol	1.258	.934	1.071	1.125	1.065	1.091	10.7
bis(2-Chloroisopropyl)ether	.452	.472	.446	.432	.480	.456	4.2
4-Methylphenol	1.564	1.469	1.348	1.224	1.283	1.377	10.0
N-Nitroso-di-n-propylamine#	1.223	1.268	1.349	1.225	1.199	1.253	4.7#
Hexachloroethane	.731	.759	.662	.601	.540	.659	13.7
Nitrobenzene	.719	.726	.630	.581	.593	.650	10.6
Isophorone	.866	.941	.840	.903	.784	.867	6.9
2-Nitrophenol*	.208	.237	.219	.243	.230	.227	6.2*
2,4-Dimethylphenol	.436	.435	.389	.390	.385	.407	6.4
Benzoic acid	.212	.247	.286	.336	.404	.297	25.4
bis(2-Chloroethoxy)methane	.437	.496	.448	.408	.462	.450	7.2
2,4-Dichlorophenol*	.312	.315	.282	.266	.226	.280	13.1*
1,2,4-Trichlorobenzene	.376	.397	.342	.325	.293	.347	11.8
Naphthalene	1.045	1.133	.910	.871	.856	.963	12.6
4-Chloroaniline	.415	.417	.333	.270	.334	.354	17.6
Hexachlorobutadiene*	.256	.248	.200	.206	.197	.222	12.7*
4-Chloro-3-methylphenol*	.322	.350	.330	.338	.370	.342	5.5*
2-Methylnaphthalene	.595	.606	.499	.515	.550	.553	8.5
Hexachlorocyclopentadiene#	.248	.372	.323	.355	.319	.324	14.7#
2,4,6-Trichlorophenol*	.391	.407	.364	.359	.308	.366	10.3*
2,4,5-Trichlorophenol	.359	.436	.379	.275	.263	.342	21.3
2-Chloronaphthalene	1.253	1.263	1.001	.974	.879	1.074	16.2
2-Nitroaniline	.385	.481	.379	.458	.475	.436	11.5
Dimethylphthalate	1.581	1.715	1.349	1.374	1.329	1.470	11.6
Acenaphthylene	1.966	1.991	1.604	1.640	1.458	1.732	13.6
2,6-Dinitrotoluene	.428	.502	.388	.438	.421	.435	9.6
3-Nitroaniline	.236	.308	.244	.271	.270	.266	10.6
Acenaphthene*	1.261	1.276	1.000	1.003	.854	1.079	17.0*
2,4-Dinitrophenol#	0.000	.124	.134	.143	.141	.135	6.5#
4-Nitrophenol#	0.000	.164	.173	.172	.190	.175	6.3#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:ETCNJ Contract:_____

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

Instrument ID:GC/MS P Calibration Date(s) 10/19/90 10/19/90

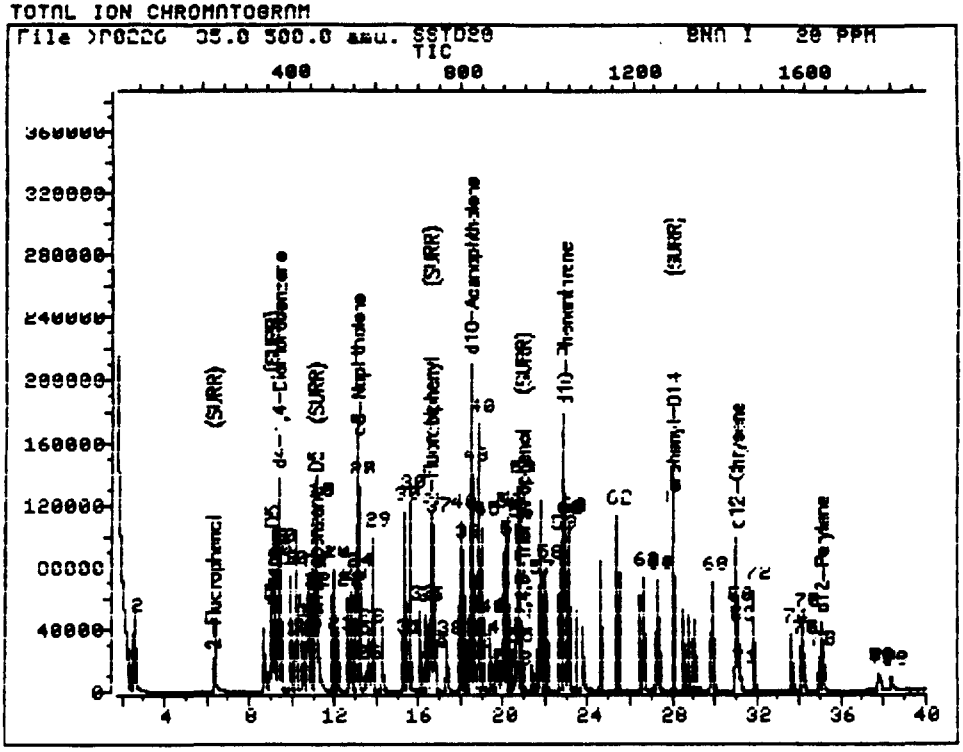
Min RRF for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 =>P0226 RRF50 =>P0225
RRF80 =>P0224 RRF120=>P0223 RRF160=>P0222

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Dibenzofuran	1.765	1.807	1.399	1.389	1.239	1.520	16.6
2,4-Dinitrotoluene	.428	.502	.388	.438	.421	.435	9.6
Diethylphthalate	1.600	1.650	1.246	1.275	1.059	1.366	18.4
4-Chlorophenyl-phenylether	.631	.638	.495	.475	.444	.537	17.0
Fluorene	1.309	1.340	1.040	1.047	.953	1.138	15.3
4-Nitroaniline	.212	.279	.214	.244	.206	.231	13.2
4,6-Dinitro-2-methylphenol	.115	.156	.142	.112	.078	.120	24.9
N-Nitrosodiphenylamine (1) *	.519	.508	.401	.372	.311	.422	21.2*
4-Bromophenyl-phenylether	.252	.266	.244	.231	.208	.240	9.2
Hexachlorobenzene	.342	.331	.302	.284	.274	.306	9.5
Pentachlorophenol *	.133	.167	.156	.153	.200	.162	15.3*
Phenanthrene	1.072	1.134	.944	.941	.843	.987	11.7
Anthracene	1.168	1.059	.921	.918	.816	.976	14.1
Di-n-butylphthalate	1.556	1.563	1.243	1.214	1.099	1.335	15.9
Fluoranthene *	.926	1.026	.769	.795	.770	.857	13.4*
Pyrene	.916	1.000	.746	.828	.769	.852	12.4
Butylbenzylphthalate	.895	.914	.784	.757	.813	.833	8.2
3,3'-Dichlorobenzidine	.196	.310	.301	.317	.272	.279	17.7
Benzo(a)anthracene	1.115	1.188	1.137	1.143	1.107	1.138	2.8
Chrysene	1.049	1.116	1.014	.937	.955	1.014	7.1
bis(2-Ethylhexyl)phthalate	1.110	1.140	1.016	.996	.985	1.049	6.7
Di-n-octylphthalate *	1.799	2.146	1.955	1.764	1.859	1.904	8.0*
Benzo(b)fluoranthene	1.244	1.199	1.348	1.274	1.550	1.323	10.4
Benzo(k)fluoranthene	1.163	1.432	1.068	.796	.654	1.023	30.0
Benzo(a)pyrene *	1.018	1.135	1.063	.992	1.027	1.047	5.3*
Indeno(1,2,3-cd)pyrene	.900	1.146	1.141	1.092	1.064	1.069	9.4
Dibenz(a,h)anthracene	.588	.812	.795	.766	.800	.752	12.4
Benzo(g,h,i)perylene	.722	.961	.991	.943	.901	.904	11.8
Nitrobenzene-d5	.441	.489	.436	.425	.429	.444	5.9
2-Fluorobiphenyl	1.321	1.322	1.042	.945	.796	1.085	21.5
Terphenyl-d14	1.259	1.255	1.063	.918	1.117	1.122	12.7
Phenol-d5	1.507	1.251	1.257	1.378	1.448	1.368	8.3
2-Fluorophenol	.891	1.200	1.384	1.417	1.465	1.271	18.5
2,4,6-Tribromophenol	.236	.259	.215	.237	.206	.231	9.0

(1) Cannot be separated from Diphenylamine

TOTAL ION CHROMATOGRAM



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Name: SSTD20
Misc: BNA 1 20 PPM BTL# 6

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:18
Injected at: 901019 19:04

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:18
Output File: ^P0226::AQ Injected at: 901019 19:04
Data File: >P0226::U5 Dilution Factor: 1.00000
Name: SSTD20
Misc: BNA I 20 PPM BTL# 6

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	9.35	375	57568	40.00	UG/ML	92
2)	N-Nitrosodimethylamine	2.58	42	24551	39.76	UG/ML	100
3)	2-Fluorophenol (SURR)	6.26	223	25638	26.65	UG/ML	97
4)	bis(2-Chloroethyl) ether	8.90	353	49326	43.30	UG/ML	92
5)	Phenol-D5 (SURR)	9.02	359	43376	40.21	UG/ML	95
6)	Phenol	9.06	361	50402	40.18	UG/ML	90
7)	2-Chlorophenol	8.96	356	39453	38.19	UG/ML	94
8)	1,3-Dichlorobenzene	9.21	368	43776	39.47	UG/ML	90
8)	1,3-Dichlorobenzene	9.39	377	45069	40.64	UG/ML	91
8)	1,3-Dichlorobenzene	9.90	402	48851	44.05	UG/ML	93
9)	1,4-Dichlorobenzene	9.21	368	43776	39.52	UG/ML	96
9)	1,4-Dichlorobenzene	9.39	377	45069	40.69	UG/ML	95
9)	1,4-Dichlorobenzene	9.90	402	48851	44.10	UG/ML	93
10)	1,2-Dichlorobenzene	9.21	368	43776	36.20	UG/ML	97
10)	1,2-Dichlorobenzene	9.39	377	45069	37.27	UG/ML	96
10)	1,2-Dichlorobenzene	9.90	402	48851	40.40	UG/ML	94
11)	Benzyl alcohol	10.08	411	35756	34.53	UG/ML	77
12)	N-Nitrosodi-n-propylamine	10.92	452	35210	35.58	UG/ML	73
13)	Hexachloroethane	10.75	444	21027	41.08	UG/ML	94
14)	2-Methylphenol	10.67	440	36213	42.90	UG/ML	72
15)	4-Methylphenol	10.67	440	36213	33.89	UG/ML	57
15)	4-Methylphenol	11.12	462	90015	84.23	UG/ML	99
16)	bis(2-Chloroisopropyl)ether	10.49	431	13012	37.04	UG/ML	100
16)	bis(2-Chloroisopropyl)ether	10.75	444	6508	18.53	UG/ML	100
17)	*d8-Naphthalene	13.07	558	214047	40.00	UG/ML	95
18)	Nitrobenzene-D5 (SURR)	11.08	460	47245	19.87	UG/ML	87
19)	Nitrobenzene	10.55	434	6441	1.84	UG/ML	66
19)	Nitrobenzene	11.12	462	76975	22.03	UG/ML	91
19)	Nitrobenzene	11.91	501	3080	.882	UG/ML	70
20)	Isophorone	11.91	501	92683	19.98	UG/ML	93
21)	2-Nitrophenol	12.08	509	22230	18.10	UG/ML	84
22)	2,4-Dimethylphenol	12.59	534	46709	21.31	UG/ML	98
23)	bis(2-Chloroethoxy)methane	12.75	542	46821	19.43	UG/ML	85
24)	1,2,4-Trichlorobenzene	13.01	555	40264	21.70	UG/ML	94
25)	2,4-Dichlorophenol	12.95	552	33419M	22.17	UG/ML	94
26)	Benzoic acid	13.48	578	22676M	14.54	UG/ML	94
27)	Naphthalene	13.14	561	111809	21.64	UG/ML	89
28)	4-Chloroaniline	13.14	561	14559	7.69	UG/ML	67
28)	4-Chloroaniline	13.56	582	44384	23.44	UG/ML	63
29)	Hexachlorobutadiene	13.83	595	27382	23.10	UG/ML	96
30)	2-Methylnaphthalene	15.25	665	63688	21.52	UG/ML	81
30)	2-Methylnaphthalene	15.56	680	65059	21.98	UG/ML	72
31)	p-Chloro-m-cresol	15.37	671	34409	18.81	UG/ML	100

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:18
Output File: ^P0226::AQ Injected at: 901019 19:04
Data File: >P0226::U5 Dilution Factor: 1.00000
Name: SSTD20
Misc: BNA I 20 PPM BTL# 6

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

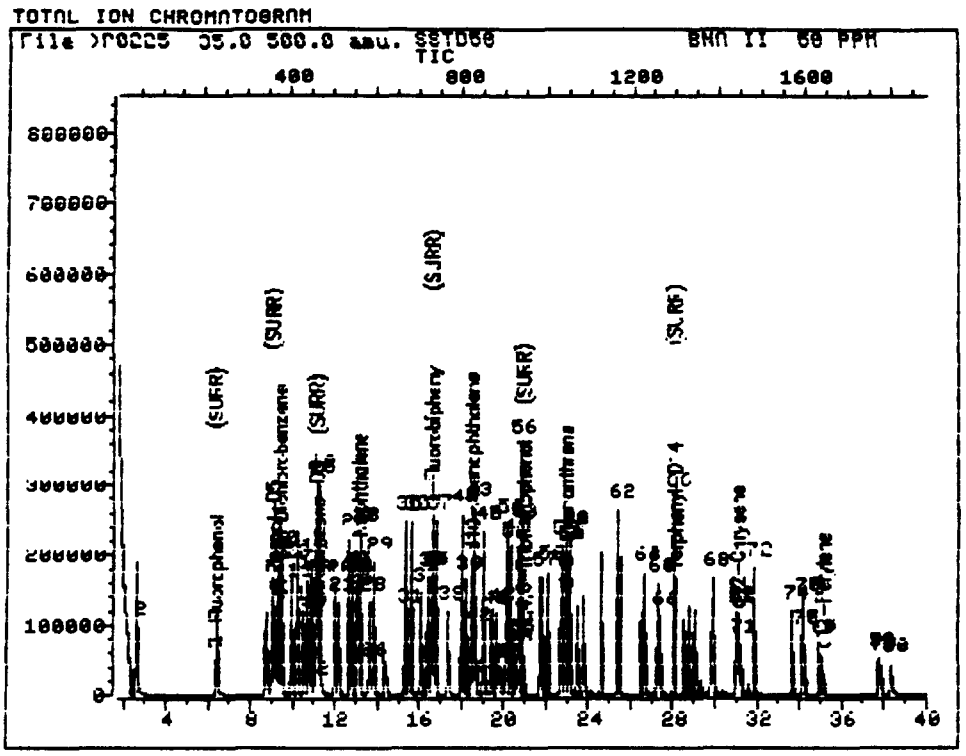
	Compound		R.T.	Scan#	Area	Conc	Units	q
32)	*d10-Acenaphthalene		18.45	822	119743	40.00	UG/ML	98
33)	Hexachlorocyclopentadiene		16.00	702	14859	15.34	UG/ML	97
34)	2,4,6-Trichlorophenol		16.37	720	23426	21.32	UG/ML	95
34)	2,4,6-Trichlorophenol		16.59	731	21470	19.54	UG/ML	97
35)	2,4,5-Trichlorophenol		16.37	720	23426	22.70	UG/ML	96
35)	2,4,5-Trichlorophenol		16.59	731	21470	20.80	UG/ML	95
36)	2-Fluorobiphenyl	(SURR)	16.55	729	79093	24.35	UG/ML	97
37)	2-Chloronaphthalene		16.70	736	75045	23.23	UG/ML	98
38)	2-Nitroaniline		17.29	765	23036	17.66	UG/ML	84
39)	Dimethyl phthalate		18.08	804	94659	21.46	UG/ML	98
40)	Acenaphthylene		17.94	797	117689	22.70	UG/ML	98
40)	Acenaphthylene		18.79	839	52333	10.09	UG/ML	44
41)	2,6-Dinitrotoluene		19.36	867	25623	19.56	UG/ML	80
42)	3-Nitroaniline		18.59	829	14115	17.69	UG/ML	100
43)	Acenaphthene		18.53	826	75479	23.38	UG/ML	99
44)	2,4-Dinitrophenol		19.06	852	2745	6.77	UG/ML	100
45)	Dibenzofuran		19.04	851	105662	23.22	UG/ML	99
46)	2,4-Dinitrotoluene		19.36	867	25623	19.56	UG/ML	98
48)	4-Nitroaniline		20.50	923	12717	18.39	UG/ML	79
49)	Diethyl phthalate		20.28	912	95794	23.33	UG/ML	91
50)	Fluorene		20.07	902	78353	23.00	UG/ML	98
51)	4-Chlorophenyl phenyl ether		19.95	896	3046	1.90	UG/ML	97
51)	4-Chlorophenyl phenyl ether		20.24	910	37795	23.53	UG/ML	90
52)	2,4,6-Tribromophenol	(SURR)	20.91	943	14154	20.51	UG/ML	87
53)	1,2-Diphenylhydrazine		20.69	932	104235	23.01	UG/ML	77
54)	*d10-Phenanthrene		22.88	1040	192005	40.00	UG/ML	99
55)	4,6-Dinitro-o-cresol		20.58	927	11011	19.05	UG/ML	69
56)	N-Nitrosodiphenylamine		20.24	910	3938	1.93	UG/ML	77
56)	N-Nitrosodiphenylamine		20.66	931	49853	24.46	UG/ML	94
57)	4-Bromophenyl phenyl ether		21.68	981	24173	20.96	UG/ML	90
58)	Hexachlorobenzene		21.99	996	32802	22.31	UG/ML	94
59)	Pentachlorophenol		22.70	1031	12782	16.46	UG/ML	97
60)	Phenanthrene		22.94	1043	102953	21.71	UG/ML	98
60)	Phenanthrene		23.09	1050	112083	23.63	UG/ML	98
61)	Anthracene		22.94	1043	102953	21.28	UG/ML	98
61)	Anthracene		23.09	1050	112083	23.17	UG/ML	97
62)	Di-n-butyl phthalate		25.30	1159	149426	23.31	UG/ML	96
63)	Fluoranthene		26.59	1222	88917	21.62	UG/ML	99
63)	Fluoranthene		27.22	1253	87980	21.39	UG/ML	98
64)	Pyrene		26.59	1222	88917	21.74	UG/ML	95
64)	Pyrene		27.22	1253	87980	21.51	UG/ML	96
65)	*d12-Chrysene		31.02	1440	94416	40.00	UG/ML	99
67)	Terphenyl-D14	(SURR)	28.01	1292	59418	22.42	UG/ML	94

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:18
Output File: ^P0226::AQ Injected at: 901019 19:04
Data File: >P0226::U5 Dilution Factor: 1.00000
Name: SSTD20
Misc: BNA I 20 PPM BTL# 6

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
68)	Butyl benzyl phthalate	29.82	1381	42238	21.46	UG/ML	92
69)	Benzo(a)anthracene	30.98	1438	52636	19.60	UG/ML	100
69)	Benzo(a)anthracene	31.10	1444	49508	18.43	UG/ML	100
70)	Chrysene	30.98	1438	52636	21.99	UG/ML	100
70)	Chrysene	31.10	1444	49508	20.68	UG/ML	100
71)	3,3'-Dichlorobenzidine	31.16	1447	9259	14.05	UG/ML	86
72)	bis(2-Ethylhexyl)phthalate	31.81	1479	52415	20.98	UG/ML	95
73)	*d12-Perylene	35.09	1640	61345	40.00	UG/ML	87
74)	Di-n-octyl phthalate	33.62	1568	55174	18.94	UG/ML	98
75)	Benzo(b)fluoranthene	34.11	1592	38170	18.81	UG/ML	89
75)	Benzo(b)fluoranthene	34.17	1595	35664	17.58	UG/ML	97
75)	Benzo(b)fluoranthene	34.95	1633	31222	15.39	UG/ML	91
76)	Benzo(k)fluoranthene	34.11	1592	38170	23.30	UG/ML	93
76)	Benzo(k)fluoranthene	34.17	1595	35664	21.77	UG/ML	98
76)	Benzo(k)fluoranthene	34.95	1633	31222	19.06	UG/ML	94
77)	Benzo(a)pyrene	34.11	1592	38170	23.78	UG/ML	91
77)	Benzo(a)pyrene	34.17	1595	35664	22.21	UG/ML	99
77)	Benzo(a)pyrene	34.95	1633	31222	19.45	UG/ML	93
78)	Indeno(1,2,3-c,d)pyrene	37.73	1770	27609	16.85	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene	38.34	1800	22155	13.52	UG/ML	100
79)	Dibenzo(a,h)anthracene	37.81	1774	18050	15.64	UG/ML	100
80)	Benzo(ghi)perylene	37.73	1770	27609	19.92	UG/ML	100
80)	Benzo(ghi)perylene	38.34	1800	22155	15.98	UG/ML	100

* Compound is ISTD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32
36
40
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(SURR)
(SURR)

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:16
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Data File: >P0225::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	9.35	375	58401	40.00	UG/ML	91
2)	N-Nitrosodimethylamine	2.62	44	64605	103.13	UG/ML	100
3)	2-Fluorophenol (SURR)	6.30	225	87598	89.75	UG/ML	95
4)	bis(2-Chloroethyl) ether	8.94	355	128358	111.06	UG/ML	94
5)	Phenol-D5 (SURR)	9.02	359	91349	83.48	UG/ML	96
6)	Phenol	9.07	361	128748	101.18	UG/ML	91
7)	2-Chlorophenol	8.98	357	102747	98.04	UG/ML	84
8)	1,3-Dichlorobenzene	9.23	369	115921	103.04	UG/ML	92
8)	1,3-Dichlorobenzene	9.41	378	119654	106.36	UG/ML	93
8)	1,3-Dichlorobenzene	9.92	403	128418	114.15	UG/ML	93
9)	1,4-Dichlorobenzene	9.23	369	115921	103.16	UG/ML	97
9)	1,4-Dichlorobenzene	9.41	378	119654	106.48	UG/ML	96
9)	1,4-Dichlorobenzene	9.92	403	128418	114.28	UG/ML	96
10)	1,2-Dichlorobenzene	9.23	369	115921	94.50	UG/ML	96
10)	1,2-Dichlorobenzene	9.41	378	119654	97.54	UG/ML	95
10)	1,2-Dichlorobenzene	9.92	403	128418	104.69	UG/ML	96
11)	Benzyl alcohol	10.12	413	106844	101.71	UG/ML	81
12)	N-Nitrosodi-n-propylamine	10.90	451	4390	4.37	UG/ML	66
12)	N-Nitrosodi-n-propylamine	11.00	456	92595	92.23	UG/ML	66
13)	Hexachloroethane	10.78	445	55408	106.70	UG/ML	95
14)	2-Methylphenol	10.67	440	68188	79.63	UG/ML	78
15)	4-Methylphenol	10.67	440	68188	62.90	UG/ML	67
15)	4-Methylphenol	11.18	465	214405	197.77	UG/ML	84
16)	bis(2-Chloroisopropyl)ether	10.51	432	34440	96.64	UG/ML	100
16)	bis(2-Chloroisopropyl)ether	10.78	445	17331	48.63	UG/ML	100
17)	*d8-Naphthalene	13.10	559	219325	40.00	UG/ML	96
18)	Nitrobenzene-D5 (SURR)	11.10	461	134070	55.04	UG/ML	92
19)	Nitrobenzene	10.76	444	11180	3.12	UG/ML	61
19)	Nitrobenzene	11.16	464	198965	55.58	UG/ML	85
19)	Nitrobenzene	11.98	504	8790	2.46	UG/ML	75
20)	Isophorone	11.98	504	258071	54.29	UG/ML	92
21)	2-Nitrophenol	12.12	511	65013	51.67	UG/ML	85
22)	2,4-Dimethylphenol	12.63	536	119176	53.05	UG/ML	98
23)	bis(2-Chloroethoxy)methane	12.79	544	135904	55.05	UG/ML	91
24)	1,2,4-Trichlorobenzene	13.04	556	108850	57.26	UG/ML	93
25)	2,4-Dichlorophenol	12.95	552	86488	56.01	UG/ML	96
26)	Benzoic acid	13.69	588	67809	42.42	UG/ML	95
27)	Naphthalene	12.95	552	3436	.649	UG/ML	88
27)	Naphthalene	13.16	562	310741	58.71	UG/ML	89
28)	4-Chloroaniline	13.16	562	39315	20.26	UG/ML	68
28)	4-Chloroaniline	13.56	582	114415	58.97	UG/ML	63
29)	Hexachlorobutadiene	13.83	595	68069	56.04	UG/ML	92
30)	2-Methylnaphthalene	15.27	666	166200	54.81	UG/ML	77

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:16
Output File: ^P0225::AQ Injected at: 901019 18:15
Data File: >P0225::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

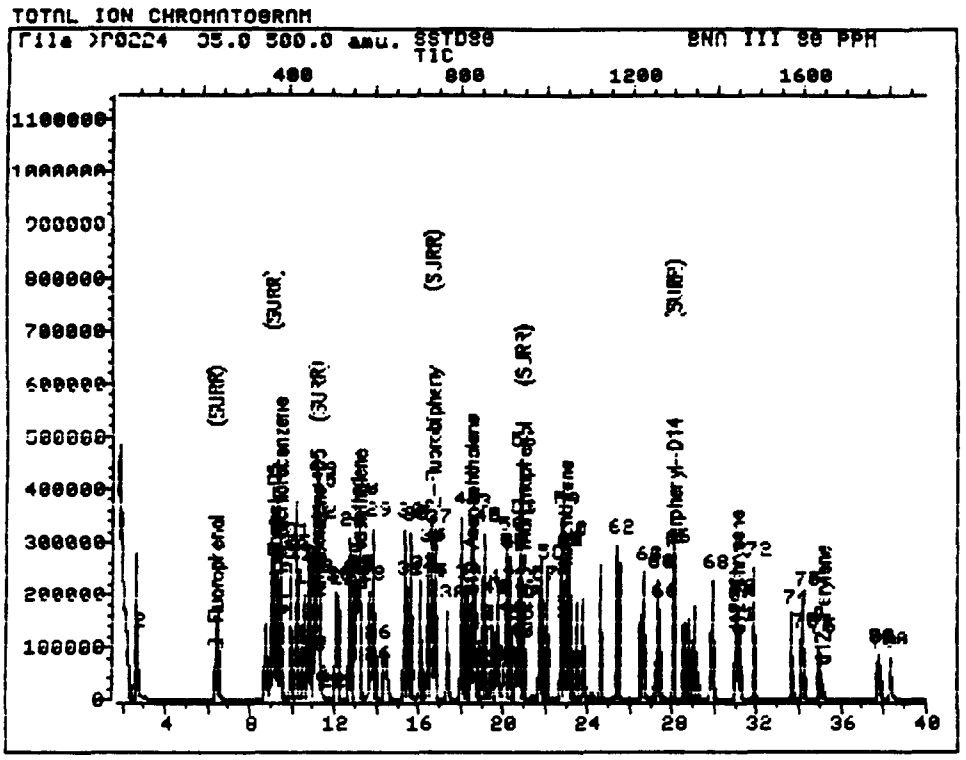
	Compound		R.T.	Scan#	Area	Conc	Units	q
30)	2-Methylnaphthalene		15.58	681	159595	52.63	UG/ML	70
31)	p-Chloro-m-cresol		15.36	670	95999	51.22	UG/ML	100
32)	*d10-Acenaphthalene		18.45	822	117890	40.00	UG/ML	98
33)	Hexachlorocyclopentadiene		16.03	703	54869	57.53	UG/ML	98
34)	2,4,6-Trichlorophenol		16.39	721	60006	55.47	UG/ML	97
34)	2,4,6-Trichlorophenol		16.56	729	64310	59.45	UG/ML	96
35)	2,4,5-Trichlorophenol		16.39	721	60006	59.05	UG/ML	96
35)	2,4,5-Trichlorophenol		16.56	729	64310	63.29	UG/ML	96
36)	2-Fluorobiphenyl	(SURR)	16.58	730	194882	60.93	UG/ML	98
37)	2-Chloronaphthalene		16.39	721	6724	2.11	UG/ML	53
37)	2-Chloronaphthalene		16.72	737	186103	58.52	UG/ML	96
38)	2-Nitroaniline		17.31	766	70935	55.25	UG/ML	87
39)	Dimethyl phthalate		18.10	805	252697	58.19	UG/ML	97
40)	Acenaphthylene		17.96	798	293471	57.50	UG/ML	98
41)	2,6-Dinitrotoluene		19.39	868	73992	57.36	UG/ML	77
42)	3-Nitroaniline		18.61	830	45322	57.68	UG/ML	100
42)	3-Nitroaniline		19.06	852	4552	5.79	UG/ML	100
43)	Acenaphthene		18.55	827	188021	59.15	UG/ML	96
44)	2,4-Dinitrophenol		18.96	847	18250	45.73	UG/ML	100
45)	Dibenzofuran		19.06	852	266337	59.46	UG/ML	99
45)	Dibenzofuran		19.71	884	12392	2.77	UG/ML	90
45)	Dibenzofuran		19.98	897	2083	.465	UG/ML	43
46)	2,4-Dinitrotoluene		19.39	868	73992	57.36	UG/ML	89
47)	4-Nitrophenol		19.71	884	16099	31.27	UG/ML	100
48)	4-Nitroaniline		20.53	924	41077	60.34	UG/ML	91
49)	Diethyl phthalate		20.32	914	243157	60.15	UG/ML	91
50)	Fluorene		20.10	903	197440	58.88	UG/ML	96
51)	4-Chlorophenyl phenyl ether		19.98	897	8599	5.44	UG/ML	96
51)	4-Chlorophenyl phenyl ether		20.26	911	93948	59.40	UG/ML	98
52)	2,4,6-Tribromophenol	(SURR)	20.92	943	38148	56.15	UG/ML	95
53)	1,2-Diphenylhydrazine		20.73	934	278753	62.51	UG/ML	70
54)	*d10-Phenanthrene		22.91	1041	181501	40.00	UG/ML	98
55)	4,6-Dinitro-o-cresol		20.63	929	35292	64.58	UG/ML	75
56)	N-Nitrosodiphenylamine		20.26	911	10606	5.51	UG/ML	77
56)	N-Nitrosodiphenylamine		20.71	933	115185	59.79	UG/ML	92
57)	4-Bromophenyl phenyl ether		21.71	982	60427	55.42	UG/ML	85
58)	Hexachlorobenzene		22.01	997	75019	53.96	UG/ML	98
59)	Pentachlorophenol		22.71	1031	37887	51.61	UG/ML	97
60)	Phenanthrene		22.97	1044	257295	57.39	UG/ML	99
60)	Phenanthrene		23.11	1051	240310	53.60	UG/ML	97
61)	Anthracene		22.97	1044	257295	56.27	UG/ML	99
61)	Anthracene		23.11	1051	240310	52.55	UG/ML	96
62)	Di-n-butyl phthalate		25.33	1160	354567	58.52	UG/ML	96

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:16
Output File: ^P0225::AQ Injected at: 901019 18:15
Data File: >P0225::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
63)	Fluoranthene		26.61	1223	232676	59.84	UG/ML	98
63)	Fluoranthene		27.23	1253	226774	58.32	UG/ML	99
64)	Pyrene		26.61	1223	232676	60.19	UG/ML	97
64)	Pyrene		27.23	1253	226774	58.66	UG/ML	96
65)	*d12-Chrysene		31.03	1440	92686	40.00	UG/ML	97
66)	Benzidine		27.37	1260	2645	7.86	UG/ML	100
66)	Benzidine		28.02	1292	3096	9.20	UG/ML	100
67)	Terphenyl-D14	(SURR)	28.04	1293	145387	55.88	UG/ML	94
68)	Butyl benzyl phthalate		29.83	1381	105859	54.80	UG/ML	91
69)	Benzo(a)anthracene		30.99	1438	137678	52.21	UG/ML	100
69)	Benzo(a)anthracene		31.12	1444	129285	49.03	UG/ML	100
70)	Chrysene		30.99	1438	137678	58.59	UG/ML	100
70)	Chrysene		31.12	1444	129285	55.01	UG/ML	100
71)	3,3'-Dichlorobenzidine		31.14	1445	35909	55.52	UG/ML	83
72)	bis(2-Ethylhexyl)phthalate		31.83	1479	132041	53.83	UG/ML	99
73)	*d12-Perylene		35.10	1640	67760	40.00	UG/ML	93
74)	Di-n-octyl phthalate		33.62	1567	181730	56.48	UG/ML	99
75)	Benzo(b)fluoranthene		34.13	1592	101580	45.32	UG/ML	90
75)	Benzo(b)fluoranthene		34.19	1595	121328	54.13	UG/ML	93
75)	Benzo(b)fluoranthene		34.94	1632	96116	42.88	UG/ML	88
76)	Benzo(k)fluoranthene		34.13	1592	101580	56.14	UG/ML	94
76)	Benzo(k)fluoranthene		34.19	1595	121328	67.05	UG/ML	96
76)	Benzo(k)fluoranthene		34.94	1632	96116	53.12	UG/ML	92
77)	Benzo(a)pyrene		34.13	1592	101580	57.28	UG/ML	92
77)	Benzo(a)pyrene		34.19	1595	121328	68.42	UG/ML	95
77)	Benzo(a)pyrene		34.94	1632	96116	54.20	UG/ML	90
78)	Indeno(1,2,3-c,d)pyrene		37.73	1769	97094	53.64	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene		38.34	1799	81407	44.97	UG/ML	100
79)	Dibenzo(a,h)anthracene		37.79	1772	68803	53.99	UG/ML	100
79)	Dibenzo(a,h)anthracene		38.34	1799	2780	2.18	UG/ML	100
80)	Benzo(ghi)perylene		37.73	1769	97094	63.42	UG/ML	100
80)	Benzo(ghi)perylene		38.34	1799	81407	53.17	UG/ML	100

* Compound is ISTD



Data File: >P0224::U5 Quant Output File: ^P0224::AQ
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:13
Injected at: 901019 17:26

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.37	376	65554	40.00	UG/ML	89
2)	N-Nitrosodimethylamine		2.66	46	94622	134.57	UG/ML	100
3)	2-Fluorophenol	(SURR)	6.34	227	181420	165.60	UG/ML	95
4)	bis(2-Chloroethyl) ether		8.98	357	165440	127.52	UG/ML	77
5)	Phenol-D5	(SURR)	9.07	361	164806	134.18	UG/ML	98
6)	Phenol		9.11	363	224966	157.50	UG/ML	94
7)	2-Chlorophenol		9.00	358	176408	149.96	UG/ML	84
8)	1,3-Dichlorobenzene		9.25	370	182596	144.60	UG/ML	89
8)	1,3-Dichlorobenzene		9.43	379	166490	131.84	UG/ML	92
8)	1,3-Dichlorobenzene		9.94	404	194070	153.68	UG/ML	95
9)	1,4-Dichlorobenzene		9.25	370	182596	144.77	UG/ML	95
9)	1,4-Dichlorobenzene		9.43	379	166490	132.00	UG/ML	96
9)	1,4-Dichlorobenzene		9.94	404	194070	153.86	UG/ML	92
10)	1,2-Dichlorobenzene		9.25	370	182596	132.61	UG/ML	96
10)	1,2-Dichlorobenzene		9.43	379	166490	120.91	UG/ML	97
10)	1,2-Dichlorobenzene		9.94	404	194070	140.94	UG/ML	93
11)	Benzyl alcohol		10.21	417	167931	142.42	UG/ML	77
12)	N-Nitrosodi-n-propylamine		10.92	452	7350	6.52	UG/ML	68
12)	N-Nitrosodi-n-propylamine		11.06	459	176910	156.99	UG/ML	67
12)	N-Nitrosodi-n-propylamine		11.25	468	2932	2.60	UG/ML	70
13)	Hexachloroethane		10.80	446	86798	148.91	UG/ML	86
14)	2-Methylphenol		10.72	442	140442	146.11	UG/ML	75
14)	2-Methylphenol		10.82	447	15423	16.05	UG/ML	73
14)	2-Methylphenol		11.22	467	353354	367.61	UG/ML	86
15)	4-Methylphenol		10.72	442	140442	115.41	UG/ML	62
15)	4-Methylphenol		10.82	447	15423	12.67	UG/ML	64
15)	4-Methylphenol		11.22	467	353354	290.37	UG/ML	91
16)	bis(2-Chloroisopropyl)ether		10.53	433	58497	146.23	UG/ML	100
16)	bis(2-Chloroisopropyl)ether		10.80	446	27469	68.67	UG/ML	100
17)	*d8-Naphthalene		13.12	560	248724	40.00	UG/ML	95
18)	Nitrobenzene-D5	(SURR)	11.14	463	216892	78.52	UG/ML	89
19)	Nitrobenzene		10.21	417	104606	25.77	UG/ML	53
19)	Nitrobenzene		10.82	447	9450	2.33	UG/ML	62
19)	Nitrobenzene		11.20	466	313628	77.26	UG/ML	86
19)	Nitrobenzene		12.02	506	11704	2.88	UG/ML	61
20)	Isophorone		12.02	506	417814	77.51	UG/ML	95
21)	2-Nitrophenol		12.14	512	109155	76.50	UG/ML	88
22)	2,4-Dimethylphenol		11.69	490	2006	.787	UG/ML	61
22)	2,4-Dimethylphenol		12.67	538	193392	75.91	UG/ML	98
23)	bis(2-Chloroethoxy)methane		12.83	546	222875	79.61	UG/ML	98
24)	1,2,4-Trichlorobenzene		13.06	557	169957	78.84	UG/ML	97
25)	2,4-Dichlorophenol		12.98	553	140310	80.12	UG/ML	94
26)	Benzoic acid		13.89	598	142091M	78.39	UG/ML	92

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

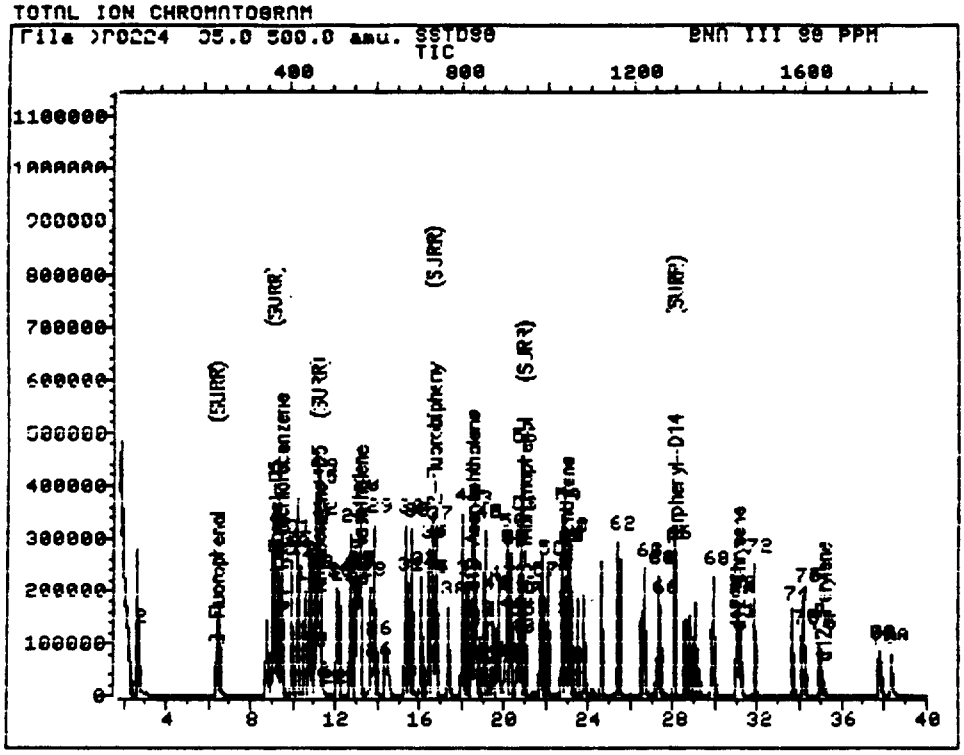
	Compound	R.T.	Scan#	Area	Conc	Units	q
26)	Benzoic acid	13.81	594	23896	13.18	UG/ML	89
26)	Benzoic acid	13.89	598	21694	11.97	UG/ML	93
27)	Naphthalene	12.98	553	6021	1.00	UG/ML	91
27)	Naphthalene	13.20	564	452848	75.44	UG/ML	88
28)	4-Chloroaniline	13.20	564	57837	26.29	UG/ML	71
28)	4-Chloroaniline	13.61	584	165562	75.25	UG/ML	63
29)	Hexachlorobutadiene	13.85	596	99604	72.31	UG/ML	97
30)	2-Methylnaphthalene	15.30	667	248408	72.23	UG/ML	77
30)	2-Methylnaphthalene	15.60	682	254462	73.99	UG/ML	75
31)	p-Chloro-m-cresol	15.38	671	164141	77.22	UG/ML	100
31)	p-Chloro-m-cresol	15.73	688	2501	1.18	UG/ML	100
32)	*d10-Acenaphthalene	18.45	822	139312	40.00	UG/ML	96
33)	Hexachlorocyclopentadiene	16.03	703	90048	79.89	UG/ML	97
34)	2,4,6-Trichlorophenol	16.42	722	101553	79.44	UG/ML	98
34)	2,4,6-Trichlorophenol	16.56	729	105496	82.53	UG/ML	93
35)	2,4,5-Trichlorophenol	16.42	722	101553	84.57	UG/ML	98
35)	2,4,5-Trichlorophenol	16.56	729	105496	87.86	UG/ML	95
36)	2-Fluorobiphenyl (SURR)	16.62	732	290234	76.79	UG/ML	97
37)	2-Chloronaphthalene	16.42	722	10904	2.90	UG/ML	55
37)	2-Chloronaphthalene	16.74	738	278859	74.20	UG/ML	97
38)	2-Nitroaniline	17.35	768	105470	69.51	UG/ML	84
39)	Dimethyl phthalate	18.15	807	375935	73.26	UG/ML	98
40)	Acenaphthylene	17.99	799	446797	74.08	UG/ML	99
40)	Acenaphthylene	18.80	839	32805	5.44	UG/ML	45
41)	2,6-Dinitrotoluene	19.43	870	108076	70.90	UG/ML	79
42)	3-Nitroaniline	18.64	831	67989	73.22	UG/ML	100
42)	3-Nitroaniline	19.09	853	5999	6.46	UG/ML	100
43)	Acenaphthene	18.58	828	278560	74.16	UG/ML	98
44)	2,4-Dinitrophenol	18.96	847	37225	78.92	UG/ML	100
45)	Dibenzofuran	19.09	853	389805	73.64	UG/ML	98
45)	Dibenzofuran	20.00	898	2538	.479	UG/ML	38
46)	2,4-Dinitrotoluene	19.43	870	108076	70.90	UG/ML	93
47)	4-Nitrophenol	19.64	880	12922	21.24	UG/ML	100
47)	4-Nitrophenol	19.74	885	15158	24.91	UG/ML	100
47)	4-Nitrophenol	20.59	927	2633	4.33	UG/ML	100
48)	4-Nitroaniline	20.59	927	59594	74.08	UG/ML	86
49)	Diethyl phthalate	20.25	910	5686	1.19	UG/ML	84
49)	Diethyl phthalate	20.37	916	347099	72.65	UG/ML	90
50)	Fluorene	20.13	904	289816	73.13	UG/ML	99
50)	Fluorene	20.96	945	3330	.840	UG/ML	88
51)	4-Chlorophenyl phenyl ether	20.00	898	13840	7.41	UG/ML	97
51)	4-Chlorophenyl phenyl ether	20.27	911	138047	73.86	UG/ML	88
52)	2,4,6-Tribromophenol (SURR)	20.94	944	59814	74.51	UG/ML	93

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
53)	1,2-Diphenylhydrazine		20.76	935	400257	75.95	UG/ML	71
54)	*d10-Phenanthrene		22.92	1041	191374	40.00	UG/ML	96
55)	4,6-Dinitro-o-cresol		20.68	931	54252	94.15	UG/ML	79
56)	N-Nitrosodiphenylamine		20.27	911	15460	7.61	UG/ML	75
56)	N-Nitrosodiphenylamine		20.74	934	153351	75.49	UG/ML	93
57)	4-Bromophenyl phenyl ether		21.71	982	93548	81.37	UG/ML	94
58)	Hexachlorobenzene		22.04	998	115440	78.76	UG/ML	92
59)	Pentachlorophenol		22.73	1032	59612	77.01	UG/ML	93
60)	Phenanthrene		23.00	1045	361407	76.46	UG/ML	98
60)	Phenanthrene		23.14	1052	352406	74.55	UG/ML	98
61)	Anthracene		23.00	1045	361407	74.96	UG/ML	98
61)	Anthracene		23.14	1052	352406	73.09	UG/ML	97
62)	Di-n-butyl phthalate		25.34	1160	475917	74.50	UG/ML	95
63)	Fluoranthene		26.62	1223	294233	71.76	UG/ML	99
63)	Fluoranthene		27.25	1254	285670	69.67	UG/ML	98
64)	Pyrene		26.62	1223	294233	72.18	UG/ML	96
64)	Pyrene		27.25	1254	285670	70.08	UG/ML	95
65)	*d12-Chrysene		31.04	1440	88414	40.00	UG/ML	98
66)	Benzidine		27.38	1260	3487	10.86	UG/ML	100
66)	Benzidine		28.05	1293	4044	12.59	UG/ML	100
67)	Terphenyl-D14	(SURR)	28.05	1293	188040	75.76	UG/ML	91
68)	Butyl benzyl phthalate		29.84	1381	138672	75.25	UG/ML	94
69)	Benzo(a)anthracene		31.00	1438	201077	79.94	UG/ML	100
69)	Benzo(a)anthracene		31.12	1444	179256	71.27	UG/ML	100
70)	Chrysene		31.00	1438	201077	89.70	UG/ML	100
70)	Chrysene		31.12	1444	179256	79.96	UG/ML	100
71)	3,3'-Dichlorobenzidine		31.15	1445	53273	86.34	UG/ML	86
72)	bis(2-Ethylhexyl)phthalate		31.84	1479	179623	76.76	UG/ML	99
73)	*d12-Perylene		35.11	1640	64166	40.00	UG/ML	95
74)	Di-n-octyl phthalate		33.63	1567	250859	82.34	UG/ML	98
75)	Benzo(b)fluoranthene		34.14	1592	173002	81.51	UG/ML	87
75)	Benzo(b)fluoranthene		34.22	1596	137006	64.55	UG/ML	92
75)	Benzo(b)fluoranthene		34.95	1632	136354	64.24	UG/ML	89
76)	Benzo(k)fluoranthene		34.14	1592	173002	100.96	UG/ML	90
76)	Benzo(k)fluoranthene		34.22	1596	137006	79.96	UG/ML	95
76)	Benzo(k)fluoranthene		34.95	1632	136354	79.58	UG/ML	93
77)	Benzo(a)pyrene		34.14	1592	173002	103.02	UG/ML	89
77)	Benzo(a)pyrene		34.22	1596	137006	81.59	UG/ML	93
77)	Benzo(a)pyrene		34.95	1632	136354	81.20	UG/ML	91
78)	Indeno(1,2,3-c,d)pyrene		37.74	1769	146429	85.43	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene		38.35	1799	127158	74.18	UG/ML	100
79)	Dibenzo(a,h)anthracene		37.80	1772	101982	84.50	UG/ML	100
79)	Dibenzo(a,h)anthracene		38.35	1799	3454	2.86	UG/ML	100

TOTAL ION CHROMATOGRAM



Data File: >P0224::U5 Quant Output File: ^P0224::AQ
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:13
Injected at: 901019 17:26

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	9.37	376	65554	40.00	UG/ML	89
2)	N-Nitrosodimethylamine	2.66	46	94622	134.57	UG/ML	100
3)	2-Fluorophenol (SURR)	6.34	227	181420	165.60	UG/ML	95
4)	bis(2-Chloroethyl) ether	8.98	357	165440	127.52	UG/ML	77
5)	Phenol-D5 (SURR)	9.07	361	164806	134.18	UG/ML	98
6)	Phenol	9.11	363	224966	157.50	UG/ML	94
7)	2-Chlorophenol	9.00	358	176408	149.96	UG/ML	84
8)	1,3-Dichlorobenzene	9.25	370	182596	144.60	UG/ML	89
8)	1,3-Dichlorobenzene	9.43	379	166490	131.84	UG/ML	92
8)	1,3-Dichlorobenzene	9.94	404	194070	153.68	UG/ML	95
9)	1,4-Dichlorobenzene	9.25	370	182596	144.77	UG/ML	95
9)	1,4-Dichlorobenzene	9.43	379	166490	132.00	UG/ML	96
9)	1,4-Dichlorobenzene	9.94	404	194070	153.86	UG/ML	92
10)	1,2-Dichlorobenzene	9.25	370	182596	132.61	UG/ML	96
10)	1,2-Dichlorobenzene	9.43	379	166490	120.91	UG/ML	97
10)	1,2-Dichlorobenzene	9.94	404	194070	140.94	UG/ML	93
11)	Benzyl alcohol	10.21	417	167931	142.42	UG/ML	77
12)	N-Nitrosodi-n-propylamine	10.92	452	7350	6.52	UG/ML	68
12)	N-Nitrosodi-n-propylamine	11.06	459	176910	156.99	UG/ML	67
12)	N-Nitrosodi-n-propylamine	11.25	468	2932	2.60	UG/ML	70
13)	Hexachloroethane	10.80	446	86798	148.91	UG/ML	86
14)	2-Methylphenol	10.72	442	140442	146.11	UG/ML	75
14)	2-Methylphenol	10.82	447	15423	16.05	UG/ML	73
14)	2-Methylphenol	11.22	467	353354	367.61	UG/ML	86
15)	4-Methylphenol	10.72	442	140442	115.41	UG/ML	62
15)	4-Methylphenol	10.82	447	15423	12.67	UG/ML	64
15)	4-Methylphenol	11.22	467	353354	290.37	UG/ML	91
16)	bis(2-Chloroisopropyl)ether	10.53	433	58497	146.23	UG/ML	100
16)	bis(2-Chloroisopropyl)ether	10.80	446	27469	68.67	UG/ML	100
17)	*d8-Naphthalene	13.12	560	248724	40.00	UG/ML	95
18)	Nitrobenzene-D5 (SURR)	11.14	463	216892	78.52	UG/ML	89
19)	Nitrobenzene	10.21	417	104606	25.77	UG/ML	53
19)	Nitrobenzene	10.82	447	9450	2.33	UG/ML	62
19)	Nitrobenzene	11.20	466	313628	77.26	UG/ML	86
19)	Nitrobenzene	12.02	506	11704	2.88	UG/ML	61
20)	Isophorone	12.02	506	417814	77.51	UG/ML	95
21)	2-Nitrophenol	12.14	512	109155	76.50	UG/ML	88
22)	2,4-Dimethylphenol	11.69	490	2006	.787	UG/ML	61
22)	2,4-Dimethylphenol	12.67	538	193392	75.91	UG/ML	98
23)	bis(2-Chloroethoxy)methane	12.83	546	222875	79.61	UG/ML	98
24)	1,2,4-Trichlorobenzene	13.06	557	169957	78.84	UG/ML	97
25)	2,4-Dichlorophenol	12.98	553	140310	80.12	UG/ML	94
26)	Benzoic acid	13.89	598	142091M	78.39	UG/ML	92

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
26)	Benzoic acid		13.81	594	23896	13.18	UG/ML	89
26)	Benzoic acid		13.89	598	21694	11.97	UG/ML	93
27)	Naphthalene		12.98	553	6021	1.00	UG/ML	91
27)	Naphthalene		13.20	564	452848	75.44	UG/ML	88
28)	4-Chloroaniline		13.20	564	57837	26.29	UG/ML	71
28)	4-Chloroaniline		13.61	584	165562	75.25	UG/ML	63
29)	Hexachlorobutadiene		13.85	596	99604	72.31	UG/ML	97
30)	2-Methylnaphthalene		15.30	667	248408	72.23	UG/ML	77
30)	2-Methylnaphthalene		15.60	682	254462	73.99	UG/ML	75
31)	p-Chloro-m-cresol		15.38	671	164141	77.22	UG/ML	100
31)	p-Chloro-m-cresol		15.73	688	2501	1.18	UG/ML	100
32)	*d10-Acenaphthalene		18.45	822	139312	40.00	UG/ML	96
33)	Hexachlorocyclopentadiene		16.03	703	90048	79.89	UG/ML	97
34)	2,4,6-Trichlorophenol		16.42	722	101553	79.44	UG/ML	98
34)	2,4,6-Trichlorophenol		16.56	729	105496	82.53	UG/ML	93
35)	2,4,5-Trichlorophenol		16.42	722	101553	84.57	UG/ML	98
35)	2,4,5-Trichlorophenol		16.56	729	105496	87.86	UG/ML	95
36)	2-Fluorobiphenyl	(SURR)	16.62	732	290234	76.79	UG/ML	97
37)	2-Chloronaphthalene		16.42	722	10904	2.90	UG/ML	55
37)	2-Chloronaphthalene		16.74	738	278859	74.20	UG/ML	97
38)	2-Nitroaniline		17.35	768	105470	69.51	UG/ML	84
39)	Dimethyl phthalate		18.15	807	375935	73.26	UG/ML	98
40)	Acenaphthylene		17.99	799	446797	74.08	UG/ML	99
40)	Acenaphthylene		18.80	839	32805	5.44	UG/ML	45
41)	2,6-Dinitrotoluene		19.43	870	108076	70.90	UG/ML	79
42)	3-Nitroaniline		18.64	831	67989	73.22	UG/ML	100
42)	3-Nitroaniline		19.09	853	5999	6.46	UG/ML	100
43)	Acenaphthene		18.58	828	278560	74.16	UG/ML	98
44)	2,4-Dinitrophenol		18.96	847	37225	78.92	UG/ML	100
45)	Dibenzofuran		19.09	853	389805	73.64	UG/ML	98
45)	Dibenzofuran		20.00	898	2538	.479	UG/ML	38
46)	2,4-Dinitrotoluene		19.43	870	108076	70.90	UG/ML	93
47)	4-Nitrophenol		19.64	880	12922	21.24	UG/ML	100
47)	4-Nitrophenol		19.74	885	15158	24.91	UG/ML	100
47)	4-Nitrophenol		20.59	927	2633	4.33	UG/ML	100
48)	4-Nitroaniline		20.59	927	59594	74.08	UG/ML	86
49)	Diethyl phthalate		20.25	910	5686	1.19	UG/ML	84
49)	Diethyl phthalate		20.37	916	347099	72.65	UG/ML	90
50)	Fluorene		20.13	904	289816	73.13	UG/ML	99
50)	Fluorene		20.96	945	3330	.840	UG/ML	88
51)	4-Chlorophenyl phenyl ether		20.00	898	13840	7.41	UG/ML	97
51)	4-Chlorophenyl phenyl ether		20.27	911	138047	73.86	UG/ML	88
52)	2,4,6-Tribromophenol	(SURR)	20.94	944	59814	74.51	UG/ML	93

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
53)	1,2-Diphenylhydrazine	20.76	935	400257	75.95	UG/ML	71
54)	*d10-Phenanthrene	22.92	1041	191374	40.00	UG/ML	96
55)	4,6-Dinitro-o-cresol	20.68	931	54252	94.15	UG/ML	79
56)	N-Nitrosodiphenylamine	20.27	911	15460	7.61	UG/ML	75
56)	N-Nitrosodiphenylamine	20.74	934	153351	75.49	UG/ML	93
57)	4-Bromophenyl phenyl ether	21.71	982	93548	81.37	UG/ML	94
58)	Hexachlorobenzene	22.04	998	115440	78.76	UG/ML	92
59)	Pentachlorophenol	22.73	1032	59612	77.01	UG/ML	93
60)	Phenanthrene	23.00	1045	361407	76.46	UG/ML	98
60)	Phenanthrene	23.14	1052	352406	74.55	UG/ML	98
61)	Anthracene	23.00	1045	361407	74.96	UG/ML	98
61)	Anthracene	23.14	1052	352406	73.09	UG/ML	97
62)	Di-n-butyl phthalate	25.34	1160	475917	74.50	UG/ML	95
63)	Fluoranthene	26.62	1223	294233	71.76	UG/ML	99
63)	Fluoranthene	27.25	1254	285670	69.67	UG/ML	98
64)	Pyrene	26.62	1223	294233	72.18	UG/ML	96
64)	Pyrene	27.25	1254	285670	70.08	UG/ML	95
65)	*d12-Chrysene	31.04	1440	88414	40.00	UG/ML	98
66)	Benzidine	27.38	1260	3487	10.86	UG/ML	100
66)	Benzidine	28.05	1293	4044	12.59	UG/ML	100
67)	Terphenyl-D14 (SURR)	28.05	1293	188040	75.76	UG/ML	91
68)	Butyl benzyl phthalate	29.84	1381	138672	75.25	UG/ML	94
69)	Benzo(a)anthracene	31.00	1438	201077	79.94	UG/ML	100
69)	Benzo(a)anthracene	31.12	1444	179256	71.27	UG/ML	100
70)	Chrysene	31.00	1438	201077	89.70	UG/ML	100
70)	Chrysene	31.12	1444	179256	79.96	UG/ML	100
71)	3,3'-Dichlorobenzidine	31.15	1445	53273	86.34	UG/ML	86
72)	bis(2-Ethylhexyl)phthalate	31.84	1479	179623	76.76	UG/ML	99
73)	*d12-Perylene	35.11	1640	64166	40.00	UG/ML	95
74)	Di-n-octyl phthalate	33.63	1567	250859	82.34	UG/ML	98
75)	Benzo(b)fluoranthene	34.14	1592	173002	81.51	UG/ML	87
75)	Benzo(b)fluoranthene	34.22	1596	137006	64.55	UG/ML	92
75)	Benzo(b)fluoranthene	34.95	1632	136354	64.24	UG/ML	89
76)	Benzo(k)fluoranthene	34.14	1592	173002	100.96	UG/ML	90
76)	Benzo(k)fluoranthene	34.22	1596	137006	79.96	UG/ML	95
76)	Benzo(k)fluoranthene	34.95	1632	136354	79.58	UG/ML	93
77)	Benzo(a)pyrene	34.14	1592	173002	103.02	UG/ML	89
77)	Benzo(a)pyrene	34.22	1596	137006	81.59	UG/ML	93
77)	Benzo(a)pyrene	34.95	1632	136354	81.20	UG/ML	91
78)	Indeno(1,2,3-c,d)pyrene	37.74	1769	146429	85.43	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene	38.35	1799	127158	74.18	UG/ML	100
79)	Dibenzo(a,h)anthracene	37.80	1772	101982	84.50	UG/ML	100
79)	Dibenzo(a,h)anthracene	38.35	1799	3454	2.86	UG/ML	100

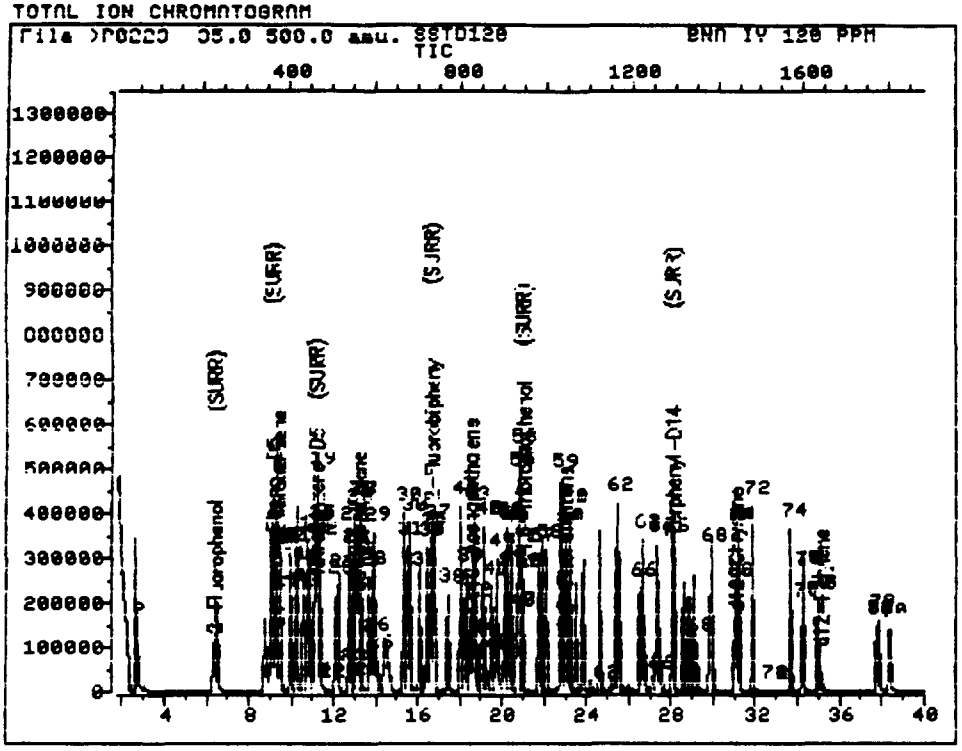
Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:13
Output File: ^P0224::AQ Injected at: 901019 17:26
Data File: >P0224::U5 Dilution Factor: 1.00000
Name: SSTD80
Misc: BNA III 80 PPM BTL# 4

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
80)	Benzo(ghi)perylene	37.74	1769	146429	101.00	UG/ML	100
80)	Benzo(ghi)perylene	38.35	1799	127158	87.70	UG/ML	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >P0223::U5 Quant Output File: ^P0223::AQ
Name: SSTD120
Misc: BNA IV 120 PPM BTL# 3

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:11
Injected at: 901019 16:38

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:11
Output File: ^P0223::AQ Injected at: 901019 16:38
Data File: >P0223::U5 Dilution Factor: 1.00000
Name: SSTD120
Misc: BNA IV 120 PPM BTL# 3

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.38	376	61812	40.00	UG/ML	91
2)	N-Nitrosodimethylamine		2.68	47	144913	218.56	UG/ML	100
3)	2-Fluorophenol	(SURR)	6.37	228	262828M	254.44	UG/ML	
4)	bis(2-Chloroethyl) ether		8.93	354	35752	29.23	UG/ML	88
4)	bis(2-Chloroethyl) ether		9.01	358	263637M	215.52	UG/ML	78
5)	Phenol-D5	(SURR)	9.11	363	255593	220.70	UG/ML	99
6)	Phenol		9.13	364	263336	195.53	UG/ML	91
7)	2-Chlorophenol		9.03	359	240750	217.05	UG/ML	83
8)	1,3-Dichlorobenzene		9.28	371	251045	210.83	UG/ML	93
8)	1,3-Dichlorobenzene		9.44	379	218924	183.86	UG/ML	89
8)	1,3-Dichlorobenzene		9.95	404	262960	220.84	UG/ML	93
9)	1,4-Dichlorobenzene		9.28	371	251045	211.08	UG/ML	95
9)	1,4-Dichlorobenzene		9.44	379	218924	184.07	UG/ML	99
9)	1,4-Dichlorobenzene		9.95	404	262960	221.10	UG/ML	97
10)	1,2-Dichlorobenzene		9.28	371	251045	193.36	UG/ML	95
10)	1,2-Dichlorobenzene		9.44	379	218924	168.62	UG/ML	99
10)	1,2-Dichlorobenzene		9.95	404	262960	202.54	UG/ML	96
11)	Benzyl alcohol		10.27	420	248034	223.08	UG/ML	77
12)	N-Nitrosodi-n-propylamine		10.97	454	9927	9.34	UG/ML	68
12)	N-Nitrosodi-n-propylamine		11.13	462	227250	213.87	UG/ML	63
12)	N-Nitrosodi-n-propylamine		11.31	471	26083	24.55	UG/ML	75
13)	Hexachloroethane		10.80	446	111505	202.87	UG/ML	92
14)	2-Methylphenol		10.74	443	208701	230.26	UG/ML	79
14)	2-Methylphenol		11.27	469	453952	500.85	UG/ML	86
15)	4-Methylphenol		10.74	443	208701	181.88	UG/ML	67
15)	4-Methylphenol		11.27	469	453952	395.62	UG/ML	88
16)	bis(2-Chloroisopropyl)ether		10.56	434	80112	212.39	UG/ML	100
16)	bis(2-Chloroisopropyl)ether		10.80	446	34791	92.24	UG/ML	100
17)	*d8-Naphthalene		13.15	561	231293	40.00	UG/ML	96
18)	Nitrobenzene-D5	(SURR)	11.17	464	294620	114.70	UG/ML	88
19)	Nitrobenzene		10.60	436	30645	8.12	UG/ML	67
19)	Nitrobenzene		11.25	468	403179	106.81	UG/ML	87
20)	Isophorone		12.09	509	626555	124.99	UG/ML	94
21)	2-Nitrophenol		12.17	513	168617	127.08	UG/ML	86
22)	2,4-Dimethylphenol		11.70	490	2560	1.08	UG/ML	63
22)	2,4-Dimethylphenol		12.72	540	270325	114.11	UG/ML	99
23)	bis(2-Chloroethoxy)methane		12.76	542	26344	10.12	UG/ML	91
23)	bis(2-Chloroethoxy)methane		12.86	547	283078	108.74	UG/ML	93
24)	1,2,4-Trichlorobenzene		13.06	557	225620	112.55	UG/ML	95
25)	2,4-Dichlorophenol		13.02	555	184319	113.18	UG/ML	94
26)	Benzoic acid		13.41	574	5894	3.50	UG/ML	80
26)	Benzoic acid		13.82	594	79564	47.20	UG/ML	94
26)	Benzoic acid		14.06	606	232982M	138.22	UG/ML	92

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:11
Output File: ^P0223::AQ Injected at: 901019 16:38
Data File: >P0223::U5 Dilution Factor: 1.00000
Name: SSTD120
Misc: BNA IV 120 PPM BTL# 3

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
27)	Naphthalene		13.02	555	7764	1.39	UG/ML	89
27)	Naphthalene		13.23	565	604068	108.22	UG/ML	89
28)	4-Chloroaniline		13.02	555	2692	1.32	UG/ML	62
28)	4-Chloroaniline		13.23	565	78760	38.49	UG/ML	69
28)	4-Chloroaniline		13.63	585	187641	91.71	UG/ML	61
29)	Hexachlorobutadiene		13.35	571	2434	1.90	UG/ML	97
29)	Hexachlorobutadiene		13.88	597	142928	111.58	UG/ML	97
30)	2-Methylnaphthalene		15.33	668	357386	111.75	UG/ML	74
30)	2-Methylnaphthalene		15.63	683	347886	108.78	UG/ML	72
31)	p-Chloro-m-cresol		15.43	673	234283	118.53	UG/ML	100
32)	*d10-Acenaphthalene		18.48	823	135385	40.00	UG/ML	97
33)	Hexachlorocyclopentadiene		16.04	703	144341	131.78	UG/ML	98
34)	2,4,6-Trichlorophenol		16.45	723	145729	117.31	UG/ML	94
34)	2,4,6-Trichlorophenol		16.59	730	111832	90.02	UG/ML	98
35)	2,4,5-Trichlorophenol		16.45	723	145729	124.89	UG/ML	94
35)	2,4,5-Trichlorophenol		16.59	730	111832	95.84	UG/ML	96
36)	2-Fluorobiphenyl	(SURR)	16.65	733	383798	104.49	UG/ML	98
37)	2-Chloronaphthalene		16.45	723	15923	4.36	UG/ML	56
37)	2-Chloronaphthalene		16.77	739	395631	108.32	UG/ML	97
38)	2-Nitroaniline		17.40	770	186016	126.15	UG/ML	76
39)	Dimethyl phthalate		18.20	809	558000	111.89	UG/ML	98
40)	Acenaphthylene		18.01	800	666145	113.65	UG/ML	99
41)	2,6-Dinitrotoluene		19.48	872	177942	120.13	UG/ML	78
42)	3-Nitroaniline		18.69	833	110054	121.97	UG/ML	100
42)	3-Nitroaniline		19.12	854	8269	9.16	UG/ML	100
43)	Acenaphthene		18.61	829	407185	111.54	UG/ML	98
44)	2,4-Dinitrophenol		18.99	848	58125	126.81	UG/ML	100
45)	Dibenzofuran		19.12	854	564166	109.68	UG/ML	97
45)	Dibenzofuran		19.77	886	31080	6.04	UG/ML	59
45)	Dibenzofuran		20.01	898	3591	.698	UG/ML	68
46)	2,4-Dinitrotoluene		19.48	872	177942	120.13	UG/ML	96
47)	4-Nitrophenol		19.12	854	2353	3.98	UG/ML	100
47)	4-Nitrophenol		19.63	879	33186	56.13	UG/ML	100
47)	4-Nitrophenol		19.77	886	20868	35.29	UG/ML	100
47)	4-Nitrophenol		20.69	931	4746	8.03	UG/ML	100
48)	4-Nitroaniline		20.69	931	99237	126.93	UG/ML	87
49)	Diethyl phthalate		20.28	911	9468	2.04	UG/ML	86
49)	Diethyl phthalate		20.42	918	517703	111.51	UG/ML	91
50)	Fluorene		20.16	905	425382	110.45	UG/ML	99
50)	Fluorene		20.99	946	4979	1.29	UG/ML	83
51)	4-Chlorophenyl phenyl ether		20.01	898	21304	11.73	UG/ML	96
51)	4-Chlorophenyl phenyl ether		20.30	912	192916	106.22	UG/ML	90
52)	2,4,6-Tribromophenol	(SURR)	20.99	946	96067	123.14	UG/ML	94

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:11
Output File: ^P0223::AQ Injected at: 901019 16:38
Data File: >P0223::U5 Dilution Factor: 1.00000
Name: SSTD120
Misc: BNA IV 120 PPM BTL# 3

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
53)	1,2-Diphenylhydrazine		20.79	936	535303	104.53	UG/ML	69
54)	*d10-Phenanthrene		22.95	1042	196816	40.00	UG/ML	96
55)	4,6-Dinitro-o-cresol		20.75	934	66322	111.91	UG/ML	60
56)	N-Nitrosodiphenylamine		20.30	912	21144	10.12	UG/ML	77
56)	N-Nitrosodiphenylamine		20.79	936	219578	105.11	UG/ML	90
57)	4-Bromophenyl phenyl ether		21.74	983	136194	115.19	UG/ML	86
58)	Hexachlorobenzene		22.07	999	167726	111.27	UG/ML	99
59)	Pentachlorophenol		22.76	1033	90198	113.30	UG/ML	95
60)	Phenanthrene		23.05	1047	555646	114.30	UG/ML	98
60)	Phenanthrene		23.19	1054	542009	111.49	UG/ML	99
61)	Anthracene		23.05	1047	555646	112.06	UG/ML	97
61)	Anthracene		23.19	1054	542009	109.31	UG/ML	97
62)	Di-n-butyl phthalate		24.72	1129	2685	.409	UG/ML	90
62)	Di-n-butyl phthalate		25.37	1161	716872	109.11	UG/ML	95
63)	Fluoranthene		26.66	1224	469126	111.25	UG/ML	99
63)	Fluoranthene		27.29	1255	489044	115.98	UG/ML	98
64)	Pyrene		26.66	1224	469126	111.91	UG/ML	97
64)	Pyrene		27.29	1255	489044	116.66	UG/ML	97
65)	*d12-Chrysene		31.06	1440	106863	40.00	UG/ML	99
66)	Benzidine		26.51	1217	2529	6.52	UG/ML	100
66)	Benzidine		27.33	1257	17249	44.44	UG/ML	100
66)	Benzidine		28.09	1294	6383	16.45	UG/ML	100
67)	Terphenyl-D14	(SURR)	28.09	1294	294231	98.08	UG/ML	95
68)	Butyl benzyl phthalate		29.21	1349	2334	1.05	UG/ML	52
68)	Butyl benzyl phthalate		29.86	1381	242833	109.02	UG/ML	92
69)	Benzo(a)anthracene		31.02	1438	366299	120.49	UG/ML	100
69)	Benzo(a)anthracene		31.16	1445	300549	98.86	UG/ML	100
70)	Chrysene		31.02	1438	366299	135.19	UG/ML	100
70)	Chrysene		31.16	1445	300549	110.93	UG/ML	100
71)	3,3'-Dichlorobenzidine		31.16	1445	101550	136.17	UG/ML	87
72)	bis(2-Ethylhexyl)phthalate		31.86	1479	319332	112.91	UG/ML	98
72)	bis(2-Ethylhexyl)phthalate		32.75	1523	3736	1.32	UG/ML	58
73)	*d12-Perylene		35.13	1640	94658	40.00	UG/ML	93
74)	Di-n-octyl phthalate		32.75	1523	3736	.831	UG/ML	99
74)	Di-n-octyl phthalate		33.67	1568	500993M	111.46	UG/ML	97
75)	Benzo(b)fluoranthene		34.19	1594	361686	115.51	UG/ML	89
75)	Benzo(b)fluoranthene		34.28	1598	226182	72.24	UG/ML	90
75)	Benzo(b)fluoranthene		34.99	1633	281811	90.00	UG/ML	86
76)	Benzo(k)fluoranthene		34.19	1594	361686	143.08	UG/ML	93
76)	Benzo(k)fluoranthene		34.28	1598	226182	89.48	UG/ML	93
76)	Benzo(k)fluoranthene		34.99	1633	281811	111.49	UG/ML	89
77)	Benzo(a)pyrene		34.19	1594	361686	146.00	UG/ML	91
77)	Benzo(a)pyrene		34.28	1598	226182	91.30	UG/ML	92

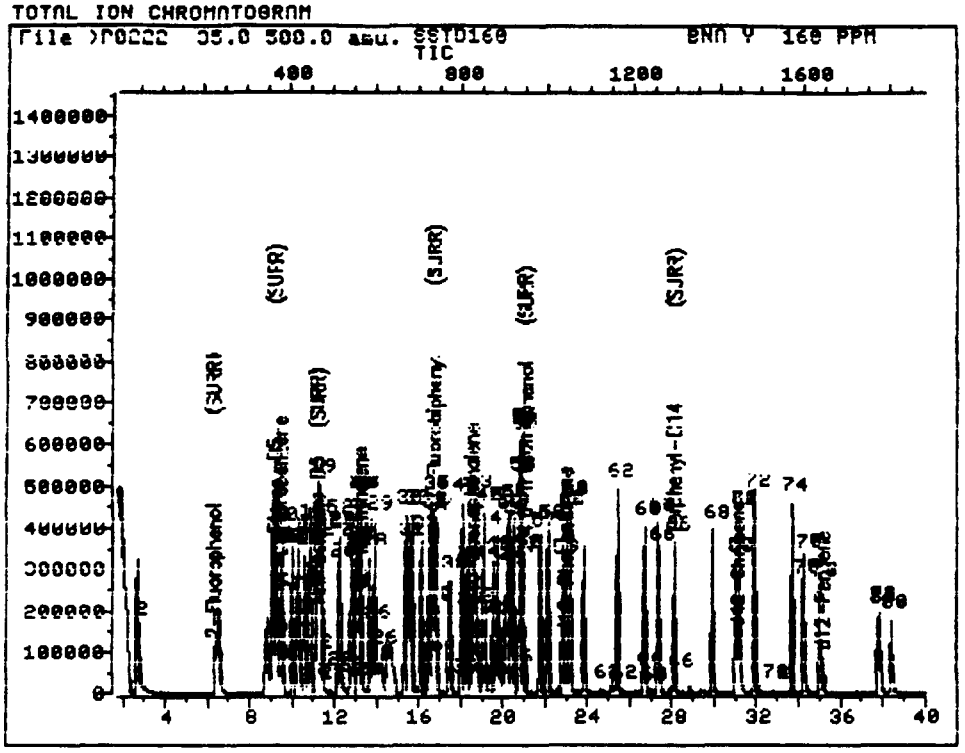
Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:11
Output File: ^P0223::AQ Injected at: 901019 16:38
Data File: >P0223::U5 Dilution Factor: 1.00000
Name: SSTD120
Misc: BNA IV 120 PPM BTL# 3

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
77)	Benzo(a)pyrene	34.99	1633	281811	113.76	UG/ML	88
78)	Indeno(1,2,3-c,d)pyrene	37.75	1769	309979	122.59	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene	38.39	1800	267812	105.91	UG/ML	100
79)	Dibenzo(a,h)anthracene	37.84	1773	217658	122.25	UG/ML	100
79)	Dibenzo(a,h)anthracene	38.39	1800	6908	3.88	UG/ML	100
80)	Benzo(ghi)perylene	37.75	1769	309979	144.93	UG/ML	100
80)	Benzo(ghi)perylene	38.39	1800	267812	125.21	UG/ML	100

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >P0222::U5 Quant Output File: ^P0222::AQ
Name: SSTD160
Misc: BNA V 160 PPM BTL# 2

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:08
Injected at: 901019 15:49

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:08
Output File: ^P0222::AQ Injected at: 901019 15:49
Data File: >P0222::U5 Dilution Factor: 1.00000
Name: SSTD160
Misc: BNA V 160 PPM BTL# 2

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	9.39	377	59793	40.00	UG/ML	91
2)	N-Nitrosodimethylamine	2.72	49	177964	277.47	UG/ML	100
3)	2-Fluorophenol (SURR)	6.24	222	350411M	350.68	UG/ML	98
4)	bis(2-Chloroethyl) ether	8.93	354	39326	33.23	UG/ML	78
4)	bis(2-Chloroethyl) ether	9.05	360	359205M	303.56	UG/ML	78
5)	Phenol-D5 (SURR)	9.15	365	346255	309.08	UG/ML	94
6)	Phenol	9.19	367	344015	264.05	UG/ML	90
6)	Phenol	9.50	382	3769	2.89	UG/ML	79
7)	2-Chlorophenol	9.07	361	302630M	282.05	UG/ML	82
7)	2-Chlorophenol	9.07	361	139667	130.17	UG/ML	82
8)	1,3-Dichlorobenzene	9.29	372	312586	271.38	UG/ML	89
8)	1,3-Dichlorobenzene	9.48	381	262963	228.30	UG/ML	95
8)	1,3-Dichlorobenzene	9.96	405	346318	300.67	UG/ML	90
9)	1,4-Dichlorobenzene	9.29	372	312586	271.70	UG/ML	94
9)	1,4-Dichlorobenzene	9.48	381	300469M	261.17	UG/ML	94
9)	1,4-Dichlorobenzene	9.96	405	346318	301.02	UG/ML	96
10)	1,2-Dichlorobenzene	9.29	372	312586	248.89	UG/ML	95
10)	1,2-Dichlorobenzene	9.48	381	262963	209.38	UG/ML	93
10)	1,2-Dichlorobenzene	9.96	405	346318	275.75	UG/ML	96
11)	Benzyl alcohol	10.15	414	28612	26.60	UG/ML	81
11)	Benzyl alcohol	10.37	425	323946	301.20	UG/ML	77
12)	N-Nitrosodi-n-propylamine	10.98	455	9229	8.98	UG/ML	70
12)	N-Nitrosodi-n-propylamine	11.09	460	18324	17.83	UG/ML	62
12)	N-Nitrosodi-n-propylamine	11.19	465	286766M	278.99	UG/ML	66
12)	N-Nitrosodi-n-propylamine	11.39	475	53530	52.08	UG/ML	73
13)	Hexachloroethane	10.82	447	129113	242.84	UG/ML	95
14)	2-Methylphenol	9.98	406	2365	2.70	UG/ML	66
14)	2-Methylphenol	10.78	445	254712	290.52	UG/ML	78
15)	4-Methylphenol	10.78	445	254712	229.48	UG/ML	65
15)	4-Methylphenol	11.33	472	613622	552.83	UG/ML	91
15)	4-Methylphenol	12.18	514	3696	3.33	UG/ML	71
16)	bis(2-Chloroisopropyl)ether	10.58	435	114767	314.54	UG/ML	100
16)	bis(2-Chloroisopropyl)ether	10.82	447	39848	109.21	UG/ML	100
17)	*d8-Naphthalene	13.18	563	235082	40.00	UG/ML	96
18)	Nitrobenzene-D5 (SURR)	11.15	463	403008M	154.37	UG/ML	
19)	Nitrobenzene	11.29	470	557677	145.36	UG/ML	88
20)	Isophorone	12.06	508	43647	8.57	UG/ML	92
20)	Isophorone	12.14	512	737509	144.76	UG/ML	94
21)	2-Nitrophenol	12.21	515	216249	160.35	UG/ML	84
22)	2,4-Dimethylphenol	11.74	492	4391	1.82	UG/ML	69
22)	2,4-Dimethylphenol	12.65	537	14593	6.06	UG/ML	99
22)	2,4-Dimethylphenol	12.78	543	362191	150.42	UG/ML	98
23)	bis(2-Chloroethoxy)methane	12.76	542	26145	9.88	UG/ML	69

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:08
Output File: ^P0222::AQ Injected at: 901019 15:49
Data File: >P0222::U5 Dilution Factor: 1.00000
Name: SSTD160
Misc: BNA V 160 PPM BTL# 2

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
23)	bis(2-Chloroethoxy)methane		12.90	549	434276	164.13	UG/ML	94
24)	1,2,4-Trichlorobenzene		13.10	559	275779	135.36	UG/ML	95
25)	2,4-Dichlorophenol		13.06	557	212977	128.67	UG/ML	99
26)	Benzoic acid		13.49	578	15999	9.34	UG/ML	82
26)	Benzoic acid		13.84	595	28809	16.82	UG/ML	93
26)	Benzoic acid		14.26	616	379686M	221.62	UG/ML	80
26)	Benzoic acid		14.26	616	44884	26.20	UG/ML	93
27)	Naphthalene		13.06	557	9490	1.67	UG/ML	91
27)	Naphthalene		13.27	567	804847	141.86	UG/ML	89
28)	4-Chloroaniline		13.06	557	3272	1.57	UG/ML	62
28)	4-Chloroaniline		13.27	567	103901	49.96	UG/ML	72
28)	4-Chloroaniline		13.67	587	313956	150.98	UG/ML	62
28)	4-Chloroaniline		13.92	599	8810	4.24	UG/ML	56
29)	Hexachlorobutadiene		13.37	572	3625	2.78	UG/ML	97
29)	Hexachlorobutadiene		13.90	598	185516	142.49	UG/ML	98
30)	2-Methylnaphthalene		15.34	669	516755	158.99	UG/ML	75
30)	2-Methylnaphthalene		15.67	685	457611	140.79	UG/ML	73
31)	p-Chloro-m-cresol		15.47	675	347816	173.13	UG/ML	100
32)	*d10-Acenaphthalene		18.50	824	161935	40.00	UG/ML	95
33)	Hexachlorocyclopentadiene		16.08	705	206614	157.71	UG/ML	99
34)	2,4,6-Trichlorophenol		16.38	720	5529	3.72	UG/ML	91
34)	2,4,6-Trichlorophenol		16.51	726	199626	134.34	UG/ML	94
34)	2,4,6-Trichlorophenol		16.63	732	170328	114.63	UG/ML	99
34)	2,4,6-Trichlorophenol		16.83	742	12400	8.34	UG/ML	97
35)	2,4,5-Trichlorophenol		16.38	720	5529	3.96	UG/ML	92
35)	2,4,5-Trichlorophenol		16.51	726	199626	143.03	UG/ML	94
35)	2,4,5-Trichlorophenol		16.63	732	170328	122.03	UG/ML	97
35)	2,4,5-Trichlorophenol		16.83	742	12400	8.88	UG/ML	94
36)	2-Fluorobiphenyl	(SURR)	16.69	735	515736	117.38	UG/ML	98
37)	2-Chloronaphthalene		16.51	726	21604	4.95	UG/ML	56
37)	2-Chloronaphthalene		16.81	741	569528	130.37	UG/ML	98
38)	2-Nitroaniline		17.46	773	307886M	174.57	UG/ML	
39)	Dimethyl phthalate		18.08	803	11838	1.98	UG/ML	96
39)	Dimethyl phthalate		18.18	808	302325	50.68	UG/ML	96
39)	Dimethyl phthalate		18.26	812	860689M	144.29	UG/ML	98
40)	Acenaphthylene		18.03	801	944353	134.70	UG/ML	98
41)	2,6-Dinitrotoluene		19.56	876	272932	154.04	UG/ML	79
42)	3-Nitroaniline		18.77	837	174735	161.90	UG/ML	100
42)	3-Nitroaniline		19.16	856	14965	13.87	UG/ML	100
43)	Acenaphthene		18.65	831	553052	126.66	UG/ML	98
44)	2,4-Dinitrophenol		19.07	852	91418	166.75	UG/ML	100
44)	2,4-Dinitrophenol		20.01	898	2050	3.74	UG/ML	100
45)	Dibenzofuran		19.16	856	802280	130.40	UG/ML	99

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:08
Output File: ^P0222::AQ Injected at: 901019 15:49
Data File: >P0222::U5 Dilution Factor: 1.00000
Name: SSTD160
Misc: BNA V 160 PPM BTL# 2

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
45)	Dibenzofuran	20.03	899	5986	.973	UG/ML	70
46)	2,4-Dinitrotoluene	19.56	876	272932	154.04	UG/ML	98
47)	4-Nitrophenol	19.16	856	3010	4.26	UG/ML	100
47)	4-Nitrophenol	19.65	880	62797	88.79	UG/ML	100
47)	4-Nitrophenol	19.81	888	28250	39.94	UG/ML	100
47)	4-Nitrophenol	20.20	907	3100	4.38	UG/ML	100
48)	4-Nitroaniline	20.79	936	133703M	142.98	UG/ML	
49)	Diethyl phthalate	19.56	876	3722	.670	UG/ML	82
49)	Diethyl phthalate	20.30	912	11604	2.09	UG/ML	82
49)	Diethyl phthalate	20.48	921	685796	123.50	UG/ML	91
50)	Fluorene	20.20	907	617448	134.04	UG/ML	97
50)	Fluorene	21.03	948	7125	1.55	UG/ML	85
51)	4-Chlorophenyl phenyl ether	20.03	899	33776	15.55	UG/ML	96
51)	4-Chlorophenyl phenyl ether	20.34	914	287521	132.35	UG/ML	92
52)	2,4,6-Tribromophenol (SURR)	21.03	948	133448	143.01	UG/ML	91
53)	1,2-Diphenylhydrazine	20.77	935	763178	124.59	UG/ML	72
54)	*d10-Phenanthrene	22.95	1042	235159	40.00	UG/ML	97
55)	4,6-Dinitro-o-cresol	20.81	937	73256M	103.46	UG/ML	
56)	N-Nitrosodiphenylamine	20.34	914	31699	12.70	UG/ML	79
56)	N-Nitrosodiphenylamine	20.67	930	4901	1.96	UG/ML	90
56)	N-Nitrosodiphenylamine	20.83	938	292544	117.20	UG/ML	91
57)	4-Bromophenyl phenyl ether	21.77	984	195896	138.67	UG/ML	88
58)	Hexachlorobenzene	22.11	1001	257563	143.00	UG/ML	97
59)	Pentachlorophenol	22.78	1034	188436	198.11	UG/ML	98
60)	Phenanthrene	23.07	1048	793371	136.59	UG/ML	99
60)	Phenanthrene	23.21	1055	767126	132.07	UG/ML	97
61)	Anthracene	23.07	1048	793371	133.91	UG/ML	98
61)	Anthracene	23.21	1055	767126	129.48	UG/ML	96
62)	Di-n-butyl phthalate	24.72	1129	3850	.490	UG/ML	100
62)	Di-n-butyl phthalate	25.39	1162	1033577	131.67	UG/ML	98
62)	Di-n-butyl phthalate	25.60	1172	3941	.502	UG/ML	73
63)	Fluoranthene	26.67	1225	724055	143.71	UG/ML	99
63)	Fluoranthene	26.94	1238	2050	.407	UG/ML	82
63)	Fluoranthene	27.31	1256	723052	143.52	UG/ML	99
64)	Pyrene	26.67	1225	724055	144.56	UG/ML	96
64)	Pyrene	26.94	1238	2050	.409	UG/ML	77
64)	Pyrene	27.31	1256	723052	144.36	UG/ML	96
65)	*d12-Chrysene	31.09	1442	115150	40.00	UG/ML	94
66)	Benzidine	26.74	1228	2324	5.56	UG/ML	100
66)	Benzidine	27.29	1255	66917	160.00	UG/ML	100
66)	Benzidine	28.08	1294	5960	14.25	UG/ML	100
66)	Benzidine	28.20	1300	2230	5.33	UG/ML	100
67)	Terphenyl-D14 (SURR)	28.08	1294	514690	159.22	UG/ML	93

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:08
Output File: ^P0222::AQ Injected at: 901019 15:49
Data File: >P0222::U5 Dilution Factor: 1.00000
Name: SSTD160
Misc: BNA V 160 PPM BTL# 2

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
68)	Butyl benzyl phthalate	29.89	1383	374697	156.12	UG/ML	80
69)	Benzo(a)anthracene	31.05	1440	509756	155.61	UG/ML	100
69)	Benzo(a)anthracene	31.19	1447	439795	134.25	UG/ML	100
70)	Chrysene	31.05	1440	509756	174.60	UG/ML	100
70)	Chrysene	31.19	1447	439795	150.64	UG/ML	100
71)	3,3'-Dichlorobenzidine	31.19	1447	125106	155.68	UG/ML	86
72)	bis(2-Ethylhexyl)phthalate	31.87	1480	453911	148.94	UG/ML	96
72)	bis(2-Ethylhexyl)phthalate	32.74	1523	6675	2.19	UG/ML	57
73)	*d12-Perylene	35.14	1641	91963	40.00	UG/ML	92
74)	Di-n-octyl phthalate	32.74	1523	6675	1.53	UG/ML	95
74)	Di-n-octyl phthalate	33.68	1569	683771M	156.59	UG/ML	96
75)	Benzo(b)fluoranthene	34.23	1596	570254	187.46	UG/ML	86
75)	Benzo(b)fluoranthene	34.31	1600	211983	69.69	UG/ML	91
75)	Benzo(b)fluoranthene	35.02	1635	377650	124.15	UG/ML	88
76)	Benzo(k)fluoranthene	34.23	1596	570254	232.21	UG/ML	89
76)	Benzo(k)fluoranthene	34.31	1600	240519M	97.94	UG/ML	94
76)	Benzo(k)fluoranthene	35.02	1635	377650	153.78	UG/ML	91
77)	Benzo(a)pyrene	34.23	1596	570254	236.94	UG/ML	87
77)	Benzo(a)pyrene	34.31	1600	211983	88.08	UG/ML	93
77)	Benzo(a)pyrene	35.02	1635	377650	156.91	UG/ML	90
78)	Indeno(1,2,3-c,d)pyrene	37.79	1771	391231	159.26	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene	38.42	1802	331304	134.86	UG/ML	100
79)	Dibenzo(a,h)anthracene	37.85	1774	294196	170.09	UG/ML	100
79)	Dibenzo(a,h)anthracene	38.42	1802	9945	5.75	UG/ML	100
80)	Benzo(ghi)perylene	37.79	1771	391231	188.28	UG/ML	100
80)	Benzo(ghi)perylene	38.42	1802	331304	159.44	UG/ML	100

* Compound is ISTD

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETCNJ Contract:_____

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

Instrument ID:GC/MS P Calibration Date: 10/20/90 Time: 0147

Lab File ID: >P0235 Init Calib. Dates(s): 10/19/90 10/19/90

Min RRF50 for SPCC(#) = 0.050 Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Phenol *	1.618	1.857	14.8*
bis(2-Chloroethyl)ether	1.531	1.612	5.2
2-Chlorophenol	1.337	1.590	18.8
1,3-Dichlorobenzene	1.432	1.514	5.7
1,4-Dichlorobenzene *	1.382	1.451	5.0*
Benzyl alcohol	1.336	1.597	19.5
1,2-Dichlorobenzene	1.561	1.734	11.1
2-Methylphenol	1.091	1.131	3.6
bis(2-Chloroisopropyl)ether	.456	.517	13.2
4-Methylphenol	1.377	1.367	.8
N-Nitroso-di-n-propylamine #	1.253	1.438	14.7#
Hexachloroethane	.659	.773	17.3
Nitrobenzene	.650	.697	7.3
Isophorone	.867	1.003	15.7
2-Nitrophenol *	.227	.230	.9*
2,4-Dimethylphenol	.407	.418	2.6
Benzoic acid	.297	.250	15.9
bis(2-Chloroethoxy)methane	.450	.481	6.7
2,4-Dichlorophenol *	.280	.318	13.5*
1,2,4-Trichlorobenzene	.347	.397	14.5
Naphthalene	.963	1.094	13.6
4-Chloroaniline	.354	.415	17.2
Hexachlorobutadiene *	.222	.234	5.5*
4-Chloro-3-methylphenol *	.342	.358	4.7*
2-Methylnaphthalene	.553	.624	12.9
Hexachlorocyclopentadiene #	.324	.342	5.8#
2,4,6-Trichlorophenol *	.366	.416	13.8*
2,4,5-Trichlorophenol	.342	.422	23.2
2-Chloronaphthalene	1.074	1.247	16.1
2-Nitroaniline	.436	.461	5.8
Dimethylphthalate	1.470	1.611	9.6
Acenaphthylene	1.732	2.002	15.6
2,6-Dinitrotoluene	.435	.462	6.2
3-Nitroaniline	.266	.291	9.5
Acenaphthene *	1.079	1.211	12.3*
2,4-Dinitrophenol #	.135	.081	40.1#
4-Nitrophenol #	.175	.105	39.9#

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:ETCNJ Contract:_____

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

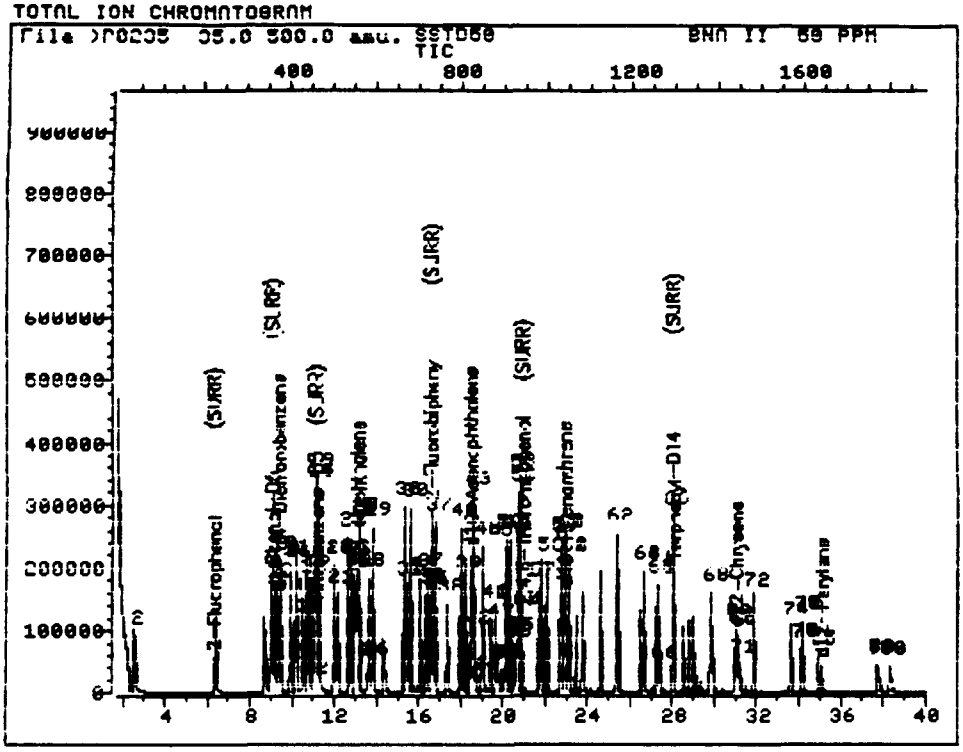
Instrument ID:GC/MS P Calibration Date: 10/20/90 Time: 0147

Lab File ID: >P0235 Init Calib. Dates(s): 10/19/90 10/19/90

Min RRF50 for SPCC(#) = 0.050 Max %RSD for CCC(*) = 25.0%

COMPOUND	RRF	RRF50	%D
Dibenzofuran	1.520	1.703	12.1
2,4-Dinitrotoluene	.435	.462	6.2
Diethylphthalate	1.366	1.494	9.4
4-Chlorophenyl-phenylether	.537	.564	5.2
Fluorene	1.138	1.251	9.9
4-Nitroaniline	.231	.250	8.2
4,6-Dinitro-2-methylphenol	.120	.143	18.5
N-Nitrosodiphenylamine (1) *	.422	.486	15.2*
4-Bromophenyl-phenylether	.240	.270	12.3
Hexachlorobenzene	.306	.338	10.5
Pentachlorophenol *	.162	.147	9.1*
Phenanthrene	.987	1.079	9.3
Anthracene	.976	1.050	7.5
Di-n-butylphthalate	1.335	1.547	15.9
Fluoranthene *	.857	.907	5.8*
Pyrene	.852	.888	4.2
Butylbenzylphthalate	.833	1.058	27.0
3,3'-Dichlorobenzidine	.279	.344	23.4
Benzo(a)anthracene	1.138	1.252	10.0
Chrysene	1.014	1.122	10.7
bis(2-Ethylhexyl)phthalate	1.049	1.338	27.5
Di-n-octylphthalate *	1.904	2.366	24.2*
Benzo(b)fluoranthene	1.323	1.230	7.0
Benzo(k)fluoranthene	1.023	1.369	33.9
Benzo(a)pyrene *	1.047	1.052	.5*
Indeno(1,2,3-cd)pyrene	1.069	1.206	12.9
Dibenz(a,h)anthracene	.752	.885	17.6
Benzo(g,h,i)perylene	.904	1.040	15.1
Nitrobenzene-d5	.444	.486	9.5
2-Fluorobiphenyl	1.085	1.264	16.4
Terphenyl-d14	1.122	1.504	34.0
Phenol-d5	1.368	1.395	2.0
2-Fluorophenol	1.271	1.110	12.7
2,4,6-Tribromophenol	.231	.224	2.8

TOTAL ION CHROMATOGRAM



Data File: >P0235::U5 Quant Output File: ^P0235::AQ
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

Operator ID: KV0786
Quant Time : 901022 12:21
Injected at: 901020 01:47

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:21
Output File: ^P0235::AQ Injected at: 901020 01:47
Data File: >P0235::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.35	375	61790	40.00	UG/ML	93
2)	N-Nitrosodimethylamine		2.58	42	55955	84.42	UG/ML	100
3)	2-Fluorophenol	(SURR)	6.28	224	85704	83.00	UG/ML	90
4)	bis(2-Chloroethyl) ether		8.94	355	124489	101.80	UG/ML	85
5)	Phenol-D5	(SURR)	9.03	359	107781	93.10	UG/ML	95
6)	Phenol		9.05	360	143446	106.55	UG/ML	91
7)	2-Chlorophenol		8.96	356	122773	110.73	UG/ML	86
8)	1,3-Dichlorobenzene		9.21	368	116917	98.23	UG/ML	93
8)	1,3-Dichlorobenzene		9.39	377	112091	94.17	UG/ML	89
8)	1,3-Dichlorobenzene		9.90	402	133916	112.51	UG/ML	91
9)	1,4-Dichlorobenzene		9.21	368	116917	98.34	UG/ML	96
9)	1,4-Dichlorobenzene		9.39	377	112091	94.28	UG/ML	99
9)	1,4-Dichlorobenzene		9.90	402	133916	112.64	UG/ML	97
10)	1,2-Dichlorobenzene		9.21	368	116917	90.08	UG/ML	95
10)	1,2-Dichlorobenzene		9.39	377	112091	86.37	UG/ML	99
10)	1,2-Dichlorobenzene		9.90	402	133916	103.18	UG/ML	97
11)	Benzyl alcohol		10.12	413	123330	110.96	UG/ML	78
12)	N-Nitrosodi-n-propylamine		10.90	451	4894	4.61	UG/ML	67
12)	N-Nitrosodi-n-propylamine		11.00	456	111040	104.54	UG/ML	70
13)	Hexachloroethane		10.78	445	59679	108.62	UG/ML	78
14)	2-Methylphenol		10.67	440	87319	96.37	UG/ML	77
14)	2-Methylphenol		11.18	465	211142	233.04	UG/ML	77
15)	4-Methylphenol		10.67	440	87319	76.13	UG/ML	65
15)	4-Methylphenol		11.18	465	211142	184.08	UG/ML	87
16)	bis(2-Chloroisopropyl)ether		10.51	432	39909	105.84	UG/ML	100
16)	bis(2-Chloroisopropyl)ether		10.78	445	18779	49.80	UG/ML	100
17)	*d8-Naphthalene		13.10	559	264666	40.00	UG/ML	95
18)	Nitrobenzene-D5	(SURR)	11.10	461	160850	54.72	UG/ML	93
19)	Nitrobenzene		10.55	434	14996	3.47	UG/ML	69
19)	Nitrobenzene		11.16	464	230603	53.39	UG/ML	86
19)	Nitrobenzene		11.98	504	10557	2.44	UG/ML	70
20)	Isophorone		11.98	504	331874	57.86	UG/ML	93
21)	2-Nitrophenol		12.12	511	75929	50.01	UG/ML	82
22)	2,4-Dimethylphenol		12.63	536	138150	50.96	UG/ML	98
23)	bis(2-Chloroethoxy)methane		12.79	544	158971	53.37	UG/ML	91
24)	1,2,4-Trichlorobenzene		13.04	556	131350	57.26	UG/ML	94
25)	2,4-Dichlorophenol		12.95	552	105320	56.52	UG/ML	96
26)	Benzoic acid		13.73	590	82579	42.81	UG/ML	95
27)	Naphthalene		12.95	552	4272	.669	UG/ML	91
27)	Naphthalene		13.16	562	361890	56.66	UG/ML	90
28)	4-Chloroaniline		13.16	562	47103	20.12	UG/ML	68
28)	4-Chloroaniline		13.57	582	137240	58.62	UG/ML	62
29)	Hexachlorobutadiene		13.83	595	77289	52.73	UG/ML	97

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:21
Output File: ^P0235::AQ Injected at: 901020 01:47
Data File: >P0235::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound	R.T.	Scan#	Area	Conc	Units	q
30)	2-Methylnaphthalene	15.28	666	206527	56.44	UG/ML	75
30)	2-Methylnaphthalene	15.58	681	193140	52.78	UG/ML	74
31)	p-Chloro-m-cresol	15.36	670	118444	52.37	UG/ML	100
32)	*d10-Acenaphthalene	18.45	822	146117	40.00	UG/ML	97
33)	Hexachlorocyclopentadiene	16.01	702	62512	52.88	UG/ML	92
34)	2,4,6-Trichlorophenol	16.38	720	76041	56.71	UG/ML	98
34)	2,4,6-Trichlorophenol	16.54	728	77074	57.48	UG/ML	96
35)	2,4,5-Trichlorophenol	16.38	720	76041	60.38	UG/ML	99
35)	2,4,5-Trichlorophenol	16.54	728	77074	61.20	UG/ML	96
36)	2-Fluorobiphenyl (SURR)	16.58	730	230786	58.21	UG/ML	99
37)	2-Chloronaphthalene	16.40	721	8225	2.09	UG/ML	55
37)	2-Chloronaphthalene	16.72	737	227794	57.79	UG/ML	98
38)	2-Nitroaniline	17.31	766	84200	52.91	UG/ML	83
39)	Dimethyl phthalate	18.11	805	294231	54.67	UG/ML	97
40)	Acenaphthylene	17.96	798	365742	57.82	UG/ML	97
41)	2,6-Dinitrotoluene	19.39	868	84445	52.82	UG/ML	78
42)	3-Nitroaniline	18.59	829	53133	54.56	UG/ML	100
42)	3-Nitroaniline	19.04	851	4764	4.89	UG/ML	100
43)	Acenaphthene	18.55	827	221183	56.14	UG/ML	99
44)	2,4-Dinitrophenol	18.96	847	14818	29.95	UG/ML	100
45)	Dibenzofuran	19.04	851	311125	56.04	UG/ML	96
45)	Dibenzofuran	19.96	896	2191	.395	UG/ML	45
46)	2,4-Dinitrotoluene	19.39	868	84445	52.82	UG/ML	88
47)	4-Nitrophenol	19.69	883	19186M	30.06	UG/ML	100
48)	4-Nitroaniline	20.53	924	45670	54.13	UG/ML	87
49)	Diethyl phthalate	20.33	914	272958	54.47	UG/ML	91
50)	Fluorene	20.10	903	228464	54.97	UG/ML	95
50)	Fluorene	20.92	943	2314	.557	UG/ML	88
51)	4-Chlorophenyl phenyl ether	19.96	896	10178	5.19	UG/ML	94
51)	4-Chlorophenyl phenyl ether	20.24	910	103062	52.58	UG/ML	89
52)	2,4,6-Tribromophenol (SURR)	20.92	943	40920	48.60	UG/ML	90
53)	1,2-Diphenylhydrazine	20.71	933	290833	52.62	UG/ML	74
54)	*d10-Phenanthrene	22.89	1040	202158	40.00	UG/ML	98
55)	4,6-Dinitro-o-cresol	20.63	929	36076	59.27	UG/ML	72
56)	N-Nitrosodiphenylamine	20.24	910	11442	5.33	UG/ML	77
56)	N-Nitrosodiphenylamine	20.69	932	122877	57.26	UG/ML	91
57)	4-Bromophenyl phenyl ether	21.69	981	68174	56.14	UG/ML	83
58)	Hexachlorobenzene	22.02	997	85512	55.23	UG/ML	98
59)	Pentachlorophenol	22.71	1031	37152	45.43	UG/ML	99
60)	Phenanthrene	22.97	1044	272628	54.60	UG/ML	98
60)	Phenanthrene	23.10	1050	265257	53.12	UG/ML	98
61)	Anthracene	22.97	1044	272628	53.53	UG/ML	97
61)	Anthracene	23.10	1050	265257	52.08	UG/ML	97

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901022 12:21
Output File: ^P0235::AQ Injected at: 901020 01:47
Data File: >P0235::U5 Dilution Factor: 1.00000
Name: SSTD50
Misc: BNA II 50 PPM BTL# 5

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 11:57 Last Qcal Time: <none>

	Compound		R.T.	Scan#	Area	Conc	Units	q
62)	Di-n-butyl phthalate		25.31	1159	390935	57.93	UG/ML	96
63)	Fluoranthene		26.60	1222	229106	52.90	UG/ML	97
63)	Fluoranthene		27.23	1253	224279	51.78	UG/ML	98
64)	Pyrene		26.60	1222	229106	53.21	UG/ML	97
64)	Pyrene		27.23	1253	224279	52.09	UG/ML	97
65)	*d12-Chrysene		31.02	1439	74122	40.00	UG/ML	97
66)	Benzidine		27.37	1260	2018	7.50	UG/ML	100
66)	Benzidine		28.00	1291	3009	11.18	UG/ML	100
67)	Terphenyl-D14	(SURR)	28.02	1292	139328	66.96	UG/ML	93
68)	Butyl benzyl phthalate		29.82	1380	97989	63.43	UG/ML	92
69)	Benzo(a)anthracene		30.97	1437	116002	55.01	UG/ML	100
69)	Benzo(a)anthracene		31.10	1443	103997	49.32	UG/ML	100
70)	Chrysene		30.97	1437	116002	61.73	UG/ML	100
70)	Chrysene		31.10	1443	103997	55.34	UG/ML	100
71)	3,3'-Dichlorobenzidine		31.14	1445	31914	61.70	UG/ML	83
72)	bis(2-Ethylhexyl)phthalate		31.81	1478	123961	63.19	UG/ML	97
73)	*d12-Perylene		35.08	1639	53486	40.00	UG/ML	90
74)	Di-n-octyl phthalate		33.60	1566	158176M	62.28	UG/ML	99
75)	Benzo(b)fluoranthene		34.11	1591	82243	46.49	UG/ML	89
75)	Benzo(b)fluoranthene		34.17	1594	91519	51.73	UG/ML	92
75)	Benzo(b)fluoranthene		34.92	1631	70322	39.75	UG/ML	90
76)	Benzo(k)fluoranthene		34.11	1591	82243	57.58	UG/ML	92
76)	Benzo(k)fluoranthene		34.17	1594	91519	64.07	UG/ML	96
76)	Benzo(k)fluoranthene		34.92	1631	70322	49.23	UG/ML	93
77)	Benzo(a)pyrene		34.11	1591	82243	58.75	UG/ML	90
77)	Benzo(a)pyrene		34.17	1594	91519	65.38	UG/ML	94
77)	Benzo(a)pyrene		34.92	1631	70322	50.24	UG/ML	91
78)	Indeno(1,2,3-c,d)pyrene		37.71	1768	80641	56.44	UG/ML	100
78)	Indeno(1,2,3-c,d)pyrene		38.32	1798	69532	48.67	UG/ML	100
79)	Dibenzo(a,h)anthracene		37.77	1771	59172	58.82	UG/ML	100
79)	Dibenzo(a,h)anthracene		38.32	1798	2448	2.43	UG/ML	100
80)	Benzo(ghi)perylene		37.71	1768	80641	66.73	UG/ML	100
80)	Benzo(ghi)perylene		38.32	1798	69532	57.53	UG/ML	100

* Compound is ISTD

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETCNJ Contract: _____

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

Lab File ID (Standard): >P0195 Data Analyzed: 10/17/90

Instrument ID: GC/MS P Time Analyzed: 1549

	IS1(DCB) AREA	#	RT	IS2(NPT) AREA	#	RT	IS3(ANT) AREA	#	RT
12 HOUR STD	82068		9.43	163057		13.18	78264		18.51
UPPER LIMIT	164136			326114			156528		
LOWER LIMIT	41034			81528			39132		
	EPA SAMPLE NO.								
01	SBLK01		133786	9.43	313802	13.16	194291	*	18.52
02	A4721		146726	9.43	363941	* 13.17	208010	*	18.52
03	A4720		132412	9.45	340894	* 13.17	214588	*	18.52
04	A4720MS		151986	9.44	320604	13.18	201598	*	18.53
05	A4720MSD		155635	9.43	316935	13.18	200161	*	18.53
06	ZZZZZ		143330	9.43	285631	13.18	190493	*	18.53
07									
08									
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21									
22									

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETCNJ Contract: _____

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

Lab File ID (Standard): >P0195 Data Analyzed: 10/17/90

Instrument ID: GC/MS P Time Analyzed: 1549

	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
	12 HOUR STD		93612	22.97		51445	31.13		38491	35.20
	UPPER LIMIT		187224			102890			76982	
	LOWER LIMIT		46806			25723			19246	
	EPA SAMPLE NO.									
01	SBLK01		322782*	22.98		183930*	31.13		127078*	35.20
02	A4721		310400*	22.98		177774*	31.13		106565*	35.20
03	A4720		309700*	22.98		176413*	31.13		102090*	35.20
04	A4720MS		268531*	22.99		145090*	31.12		95336*	35.19
05	A4720MSD		282029*	22.98		180048*	31.14		127284*	35.21
06	ZZZZZ		280447*	22.98		162787*	31.12		104685*	35.21
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Naphthalene-d8
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

page ___ of ___

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETCNJ Contract: _____

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

Lab File ID (Standard): >P0235 Data Analyzed: 10/20/90

Instrument ID: GC/MS P Time Analyzed: 0147

	IS1(DCB) AREA	#	RT	IS2(NPT) AREA	#	RT	IS3(ANT) AREA	#	RT
	12 HOUR STD		61790	9.35		264666	13.10		146117		18.45
	UPPER LIMIT		123580			529332			292234		
	LOWER LIMIT		30895			132333			73058		
	EPA SAMPLE NO.										
01	SBLK01		66902	9.33		277987	13.05		173845		18.42
02	A4721		80982	9.33		334988	13.08		184577		18.42
03	A4720		71770	9.33		299585	13.08		171428		18.42
04	A4720MS		71995	9.33		298097	13.08		190664		18.43
05	A4720MSD		69684	9.33		280477	13.08		175947		18.43
06											
07											
08											
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18											
19											
20											
21											
22											

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: ETCNJ Contract: _____

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

Lab File ID (Standard): >P0235 Data Analyzed: 10/20/90

Instrument ID: GC/MS P Time Analyzed: 0147

	IS4(PHN) AREA	#	RT	IS5(CRY) AREA	#	RT	IS6(PRY) AREA	#	RT
12 HOUR STD	202158		22.89	74122		31.02	53486		35.08
UPPER LIMIT	404316			148244			106972		
LOWER LIMIT	101079			37061			26743		
EPA SAMPLE NO.									
01 SBLK01	301330		22.88	159326	*	31.01	86055		35.08
02 A4721	322610		22.88	201378	*	31.01	126589	*	35.08
03 A4720	313432		22.88	163376	*	31.01	77200		35.06
04 A4720MS	317928		22.88	151226	*	31.00	90017		35.07
05 A4720MSD	281667		22.88	161743	*	31.00	101499		35.07
06									
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21									
22									

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Naphthalene-d8
IS6 (PRY) = Perylene-d12

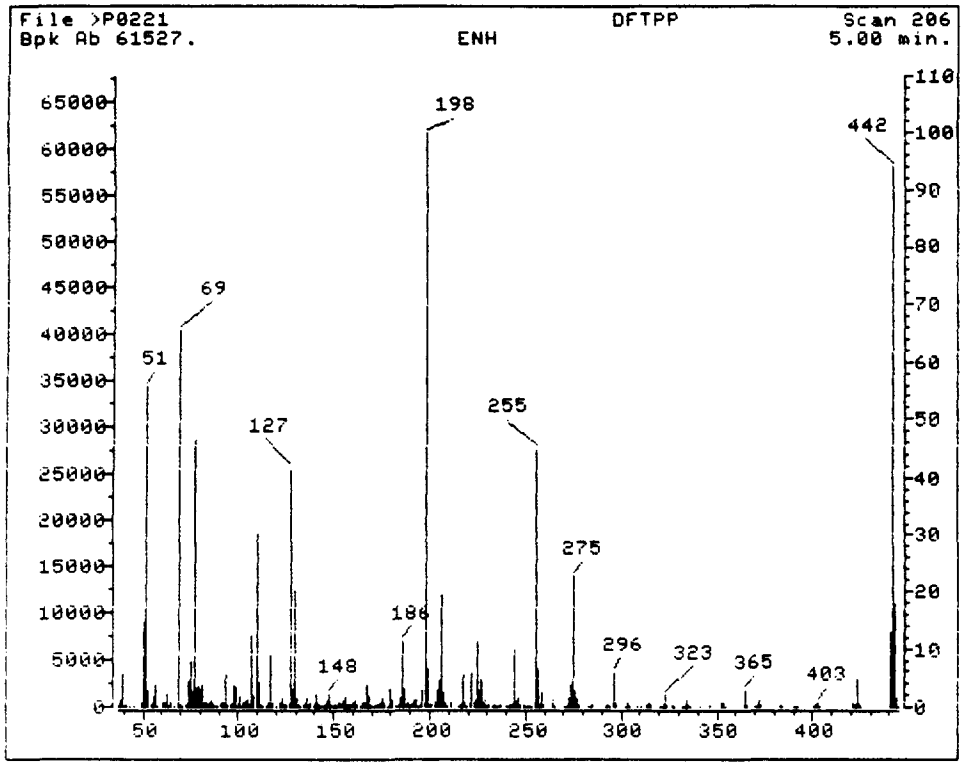
UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk.

RAW QC DATA

MS Data File: >P0221::U5

Name: ..... Operator: KV0786 Date/Time: 10/19/90 15:33
Misc: DFTPP BTL# 1



MS Data File: >P0221::U5

Name: ..... Operator: KV0786 Date/Time: 10/19/90 15:33
Misc: DFTPP BTL# 1

>P0221 DFTPP
206 NRM ENH

File: >P0221 Scan #: 206 Retn. time: 5.00

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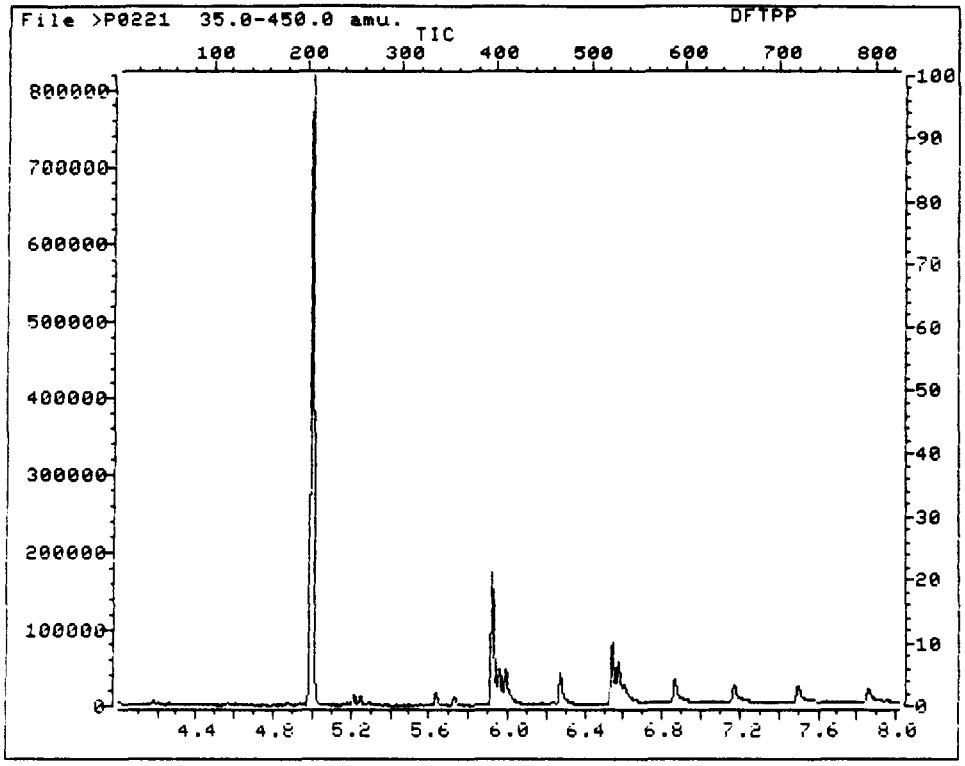
36.95	.238	103.95	1.146	162.10	.277	221.05	5.994	296.90	.790
38.05	.933	105.05	1.041	164.00	.088	223.05	1.146	302.00	.061
39.05	5.489	106.15	.306	165.00	.769	224.05	11.099	303.00	.657
40.05	.141	107.05	12.118	166.00	.660	225.05	2.759	304.00	.209
40.95	.362	108.05	1.830	167.00	3.898	226.05	.163	308.10	.031
42.95	.151	110.00	30.026	168.00	1.802	227.05	4.792	310.10	.030
44.95	.127	111.00	4.173	169.10	.289	228.05	.647	314.10	.267
49.05	.628	112.00	.507	170.20	.082	229.05	.997	315.00	.683
50.05	14.749	113.00	.130	171.00	.150	229.95	.043	316.00	.391
51.05	55.817	115.00	.038	172.00	.355	231.05	.410	321.00	.203
52.05	2.773	116.00	.766	173.00	.426	232.85	.082	322.20	.066
55.05	.440	117.00	8.985	174.00	.843	233.95	.263	323.00	2.021
56.05	1.850	118.00	.674	175.00	1.484	234.95	.256	324.10	.398
57.05	3.946	120.10	.155	176.10	.512	235.95	.191	327.00	.390
57.95	.166	121.90	.842	176.90	.768	237.05	.348	327.95	.138
61.05	.690	123.00	1.307	178.00	.254	239.95	.112	332.05	.092
62.05	.735	124.00	.564	179.00	3.114	240.95	.234	332.95	.173
63.05	1.988	125.00	.557	180.00	1.897	241.95	.570	334.05	1.239
64.05	.237	127.00	41.595	181.00	1.018	243.05	.535	335.05	.341
65.05	.924	128.00	3.229	182.10	.121	244.05	9.856	335.95	.020
67.05	.091	129.00	19.932	182.85	.027	245.05	1.216	341.05	.251
68.95	65.606	130.00	1.558	183.95	.214	246.05	1.763	345.95	.371
69.95	.322	131.00	.268	185.05	1.392	247.05	.336	352.05	.664
70.95	.080	132.20	.100	185.95	11.305	248.95	.304	353.05	.410
73.05	.356	134.00	.504	186.95	3.262	249.95	.027	354.05	.634
74.05	4.525	135.00	1.401	187.95	.305	250.95	.029	354.95	.113
75.05	7.763	136.00	.562	188.95	.700	251.95	.042	364.95	2.794
76.05	2.354	137.00	.695	189.85	.063	253.05	.203	365.95	.388
77.05	46.469	138.00	.084	191.05	.289	255.05	44.806	369.95	.049
78.05	3.070	140.00	.171	191.95	.957	256.00	6.351	371.05	.176
79.05	3.521	141.00	2.155	193.05	1.004	257.00	.471	372.05	1.200
80.05	2.642	142.10	.774	193.95	.192	258.00	2.588	373.05	.326
81.05	3.721	143.00	.542	195.05	.142	259.00	.411	382.95	.321
82.05	.922	144.00	.086	195.95	2.893	264.00	.057	383.95	.072
83.05	.926	144.90	.036	197.95	100.000	264.90	.962	390.05	.147
84.05	.267	146.00	.366	198.95	6.365	266.00	.085	391.05	.103
85.05	.704	147.00	1.046	200.05	.457	271.00	.061	392.05	.062
86.05	1.045	148.00	2.266	201.45	.532	272.00	.084	401.00	.051
87.05	.339	148.90	.480	202.95	.596	273.00	1.478	402.00	.470
88.05	.136	150.00	.103	203.95	2.756	274.00	3.844	403.00	.695
88.95	.029	151.00	.296	204.95	4.548	275.00	22.709	404.10	.240
91.05	.906	152.00	.203	206.05	19.184	276.00	2.913	421.00	.613
92.05	.855	153.00	.711	207.05	2.540	276.90	1.578	422.00	.577
93.05	5.443	154.10	.545	208.05	.700	278.00	.276	423.00	4.980
94.05	.355	155.00	1.112	208.95	.193	283.00	.135	424.00	.919
96.15	.267	156.10	1.656	210.95	.840	284.00	.103	425.10	.055
97.95	3.759	157.10	.411	215.05	.205	285.10	.296	441.00	13.013
99.05	3.315	157.90	.383	216.15	.485	292.10	.031	442.00	93.952
99.95	.248	159.10	.291	216.95	5.510	293.00	.355	443.00	17.483
101.05	1.744	160.10	.638	218.05	.667	294.00	.078	444.10	1.503
102.05	.079	161.00	1.036	219.05	.024	296.00	5.875	445.00	.089
102.95	.675								

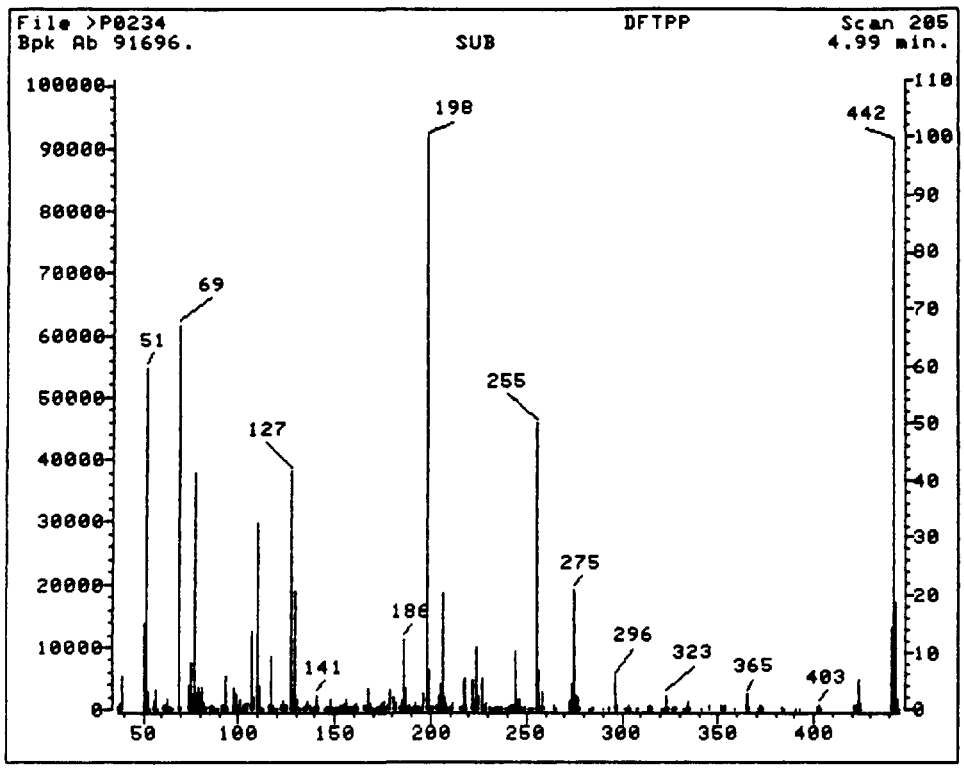
MS Data File: >P0221::U5

Name: ..... Operator: KV0786 Date/Time: 10/19/90 15:33
Misc: DFTPP BTL# 1



MS Data File: >P0234::U5

Name: ..... Operator: KV0786 Date/Time: 10/20/90 1:30
Misc: DFTPP BTL# 1



MS Data File: >P0234::U5

Name: ..... Operator: KV0786 Date/Time: 10/20/90 1:30
Misc: DFTPP BTL# 1

>P0234 DFTPP
205 SUB NRM

File: >P0234 Scan #: 205 Retn. time: 4.99

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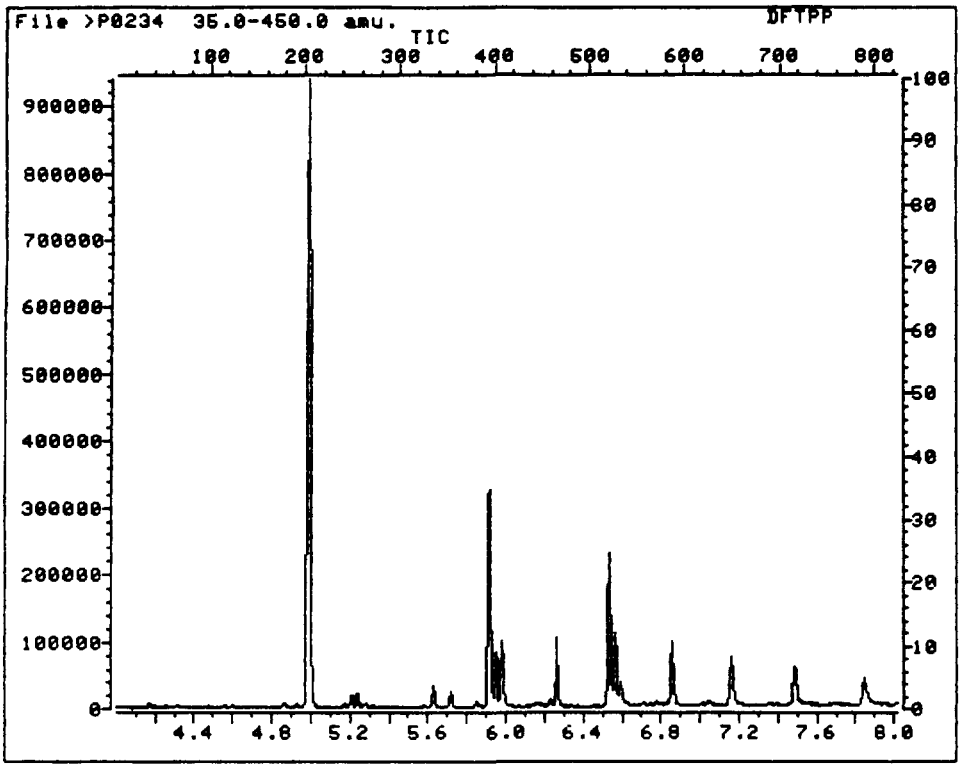
36.95	.340	111.00	4.228	167.00	3.897	225.05	2.501	302.00	.105
38.05	1.004	112.00	.485	168.00	1.216	227.05	5.343	303.10	.766
39.05	5.708	113.00	.179	169.10	.375	228.05	.693	304.10	.222
50.05	14.839	116.10	.901	170.20	.182	229.05	1.165	308.00	.099
51.05	59.611	117.00	9.275	170.90	.218	231.05	.460	309.10	.083
52.05	3.169	118.00	.714	172.00	.406	232.05	.071	314.10	.399
53.05	.109	119.00	.133	173.00	.552	233.15	.109	315.00	.760
56.05	1.493	120.00	.137	174.00	.939	234.05	.318	316.00	.477
57.05	3.488	122.00	.879	175.10	1.266	235.05	.336	321.00	.244
58.15	.230	123.00	1.445	176.10	.492	236.05	.202	322.10	.149
61.05	.698	124.00	.618	177.00	.876	237.05	.406	323.10	2.605
62.05	.845	125.00	.593	179.00	3.385	239.15	.191	324.10	.402
63.05	1.879	127.00	41.511	180.10	2.131	240.05	.171	326.10	.095
64.05	.368	128.00	3.503	181.10	.997	241.05	.300	327.10	.490
65.05	.435	129.00	20.754	182.00	.171	242.05	.622	327.95	.262
66.05	.087	130.00	1.700	183.95	.342	243.05	.712	331.95	.190
69.05	67.006	131.10	.364	185.05	1.589	244.05	10.059	333.05	.254
70.05	.356	132.00	.174	186.05	12.370	245.05	1.310	334.05	1.472
74.05	4.145	133.00	.083	187.05	3.694	246.05	1.937	335.05	.390
75.05	8.029	134.00	.579	188.05	.325	247.05	.420	341.15	.249
76.05	2.622	135.00	1.589	188.95	.836	248.05	.080	345.95	.605
77.05	41.442	136.00	.625	189.95	.177	249.05	.341	352.05	.689
78.05	2.830	137.10	.685	191.05	.399	250.95	.131	353.05	.521
79.05	3.686	138.00	.170	192.05	1.094	251.95	.085	354.15	.756
80.05	2.859	138.90	.079	193.05	.545	253.15	.229	359.05	.083
81.05	3.821	140.00	.267	194.15	.257	255.05	49.962	364.95	2.732
82.05	.966	141.00	2.469	195.05	.149	256.00	6.866	365.95	.364
83.05	.473	142.10	.790	195.95	2.902	257.10	.513	371.05	.198
85.05	.342	145.00	.110	197.95	100.000	258.00	3.150	372.15	.862
86.05	.633	146.00	.424	199.05	6.908	259.00	.466	373.15	.353
87.05	.305	147.00	.278	200.05	.469	265.00	.691	383.05	.416
88.05	.218	148.00	1.832	201.55	.479	265.90	.167	384.05	.109
89.05	.110	149.10	.477	203.05	.660	266.10	.154	390.15	.197
91.05	.733	150.10	.155	204.05	2.539	273.00	1.526	391.05	.143
92.05	.922	151.10	.299	205.05	4.608	274.10	4.586	392.15	.154
93.05	5.705	151.90	.214	206.05	20.456	275.10	20.873	402.10	.436
94.05	.427	153.00	.843	207.05	1.958	276.10	2.601	403.10	.784
98.05	3.866	154.10	.612	208.05	.735	277.00	1.975	404.00	.246
99.05	2.787	155.10	.987	209.05	.180	278.00	.338	421.10	.671
100.05	.350	156.00	1.613	210.25	.382	283.10	.200	422.10	.607
101.05	1.778	157.10	.434	211.05	.931	284.20	.142	423.10	5.290
102.15	.110	158.00	.450	215.05	.311	285.10	.297	424.10	1.029
103.05	.697	159.00	.373	216.05	.486	290.10	.083	441.10	14.278
104.05	1.263	160.00	.832	216.95	5.591	293.10	.410	442.10	99.005
105.05	1.192	161.10	1.130	218.05	.754	296.00	5.681	443.10	18.601
107.05	13.753	162.00	.284	221.05	5.105	297.10	.848	444.10	1.650
108.05	1.953	165.00	.895	223.05	1.131	301.00	.107	445.20	.069

110.00 92.927 168.00 .880 224.09 10.709

MS Data File: >P0234::U5

Name: ..... Operator: KV0786 Date/Time: 10/20/90 1:30
Misc: DFTPP BTL# 1



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70282C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >P0238

Level: (low/med) LOW Date Received: 10/11/90

% Moisture: not dec. 0 dec. 0 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1 ~~32767~~ 10-31-90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
108-60-1	bis(2-Chloroisopropyl)ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-di-n-propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	110	J
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic acid	1700	U
111-91-1	bis(2-Chloroethoxy)methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1700	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1700	U
131-11-3	Dimethylphthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK01

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70282C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >P0238

Level: (low/med) LOW Date Received: 10/11/90.

% Moisture: not dec. 0 dec. 0 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1 ~~32767~~ 10-30-90.

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1700	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1700	U
100-02-7	4-Nitrophenol	1700	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1700	U
534-52-1	4,6-Dinitro-2-methylphenol	1700	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1700	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	670	U
56-55-3	Benzo(a)anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)phthalate	330	U
117-84-0	Di-n-octylphthalate	330	U
205-99-2	Benzo(b)fluoranthene	330	U
207-08-9	Benzo(k)fluoranthene	330	U
50-32-8	Benzo(a)pyrene	330	U
193-39-5	Indeno(1,2,3-cd)pyrene	330	U
53-70-3	Dibenz(a,h)anthracene	330	U
191-24-2	Benzo(g,h,i)perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.: SBLK01

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: QC70282C

Sample wt/vol: 30.0 (g/mL) G Lab File ID: >P0238

Level: (low/med) LOW Date Received: 10/11/90

% Moisture: not dec. 0 dec. Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

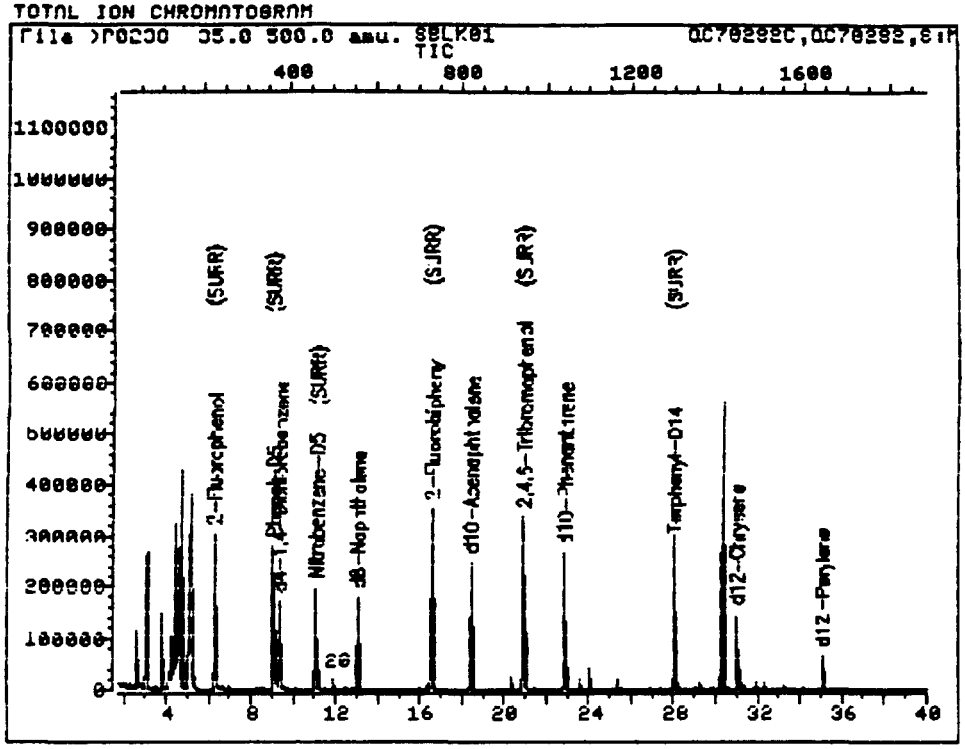
GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.0

Number TICs found: 12

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC	Q
01.		Aldol Condensate	5.22	10000	J
02.		Unknown Alkane	4.69	5500	J
03.	4337-65-9	Hexanedioic acid, mono(2-eth	30.32	5300	J
04.		Unknown Alkane	4.47	3700	J
05.	108-88-3	Benzene, methyl- (9CI)	3.05	2300	J
06.		Aldol Condensate	3.76	1100	J
07.	54549-80-3	Cyclopentane, 2-ethyl-1,1-di	4.25	950	J
08.	108-10-1	2-Pentanone, 4-methyl- (8CI9	2.60	450	J
09.		Unknown Alkene	4.14	330	J
10.		Unknown plthalate	24.08	150	J
11.	3073-66-3	Cyclohexane, 1,1,3-trimethyl	4.78	220	J
12.	55170-84-8	Cyclobutane, 1-hexyl-2,3-dim	30.16	190	J'

TOTAL ION CHROMATOGRAM



Data File: >P0238::U6 Quant Output File: ^P0238::AQ
Name: SBLK01
Misc: QC70282C,QC70282,S:M4,30.00,1 BTL#18

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

Operator ID: KV0786
Quant Time : 901025 12:55
Injected at: 901020 03:24

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901025 12:55
Output File: ^P0238::AQ Injected at: 901020 03:24
Data File: >P0238::U6 Dilution Factor: 1.00000
Name: SBLK01
Misc: QC70282C,QC70282,S:M4,30.00,1 BTL#18

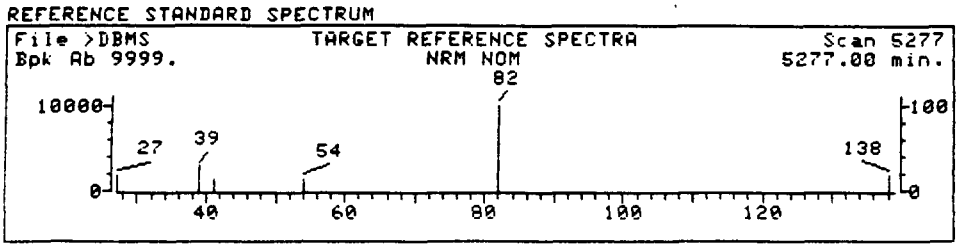
ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.33	374	66902	40.00	UG/ML	93
3)	2-Fluorophenol	(SURR)	6.24	222	274622	147.97	UG/ML	98
5)	Phenol-D5	(SURR)	9.05	360	465580	199.48	UG/ML	97
17)	*d8-Naphthalene		13.05	557	277987	40.00	UG/ML	96
18)	Nitrobenzene-D5	(SURR)	11.08	460	228694	67.68	UG/ML	92
20)	Isophorone		11.87	499	22697	3.26	UG/ML	93
32)	*d10-Acenaphthalene		18.42	821	173845	40.00	UG/ML	99
36)	2-Fluorobiphenyl	(SURR)	16.57	730	380962	69.37	UG/ML	98
52)	2,4,6-Tribromophenol	(SURR)	20.92	944	167102	171.61	UG/ML	93
54)	*d10-Phenanthrene		22.88	1040	301330	40.00	UG/ML	98
65)	*d12-Chrysene		31.01	1440	159326	40.00	UG/ML	96
67)	Terphenyl-D14	(SURR)	28.02	1293	457783	76.43	UG/ML	94
73)	*d12-Perylene		35.08	1640	86055	40.00	UG/ML	92

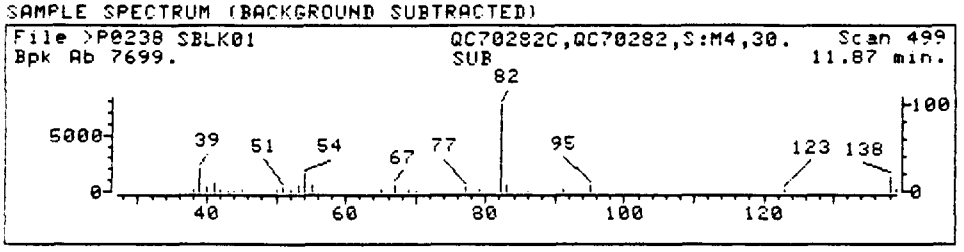
* Compound is ISTD

CA
10-30-90

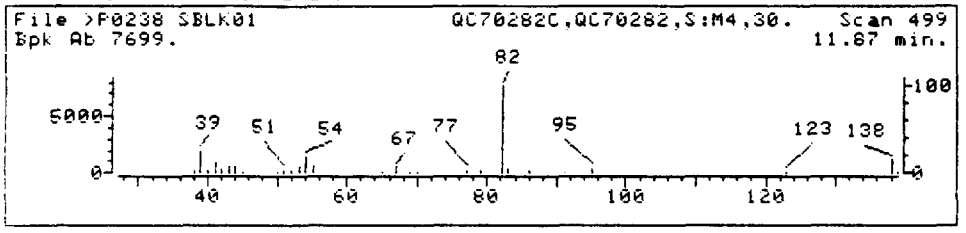
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

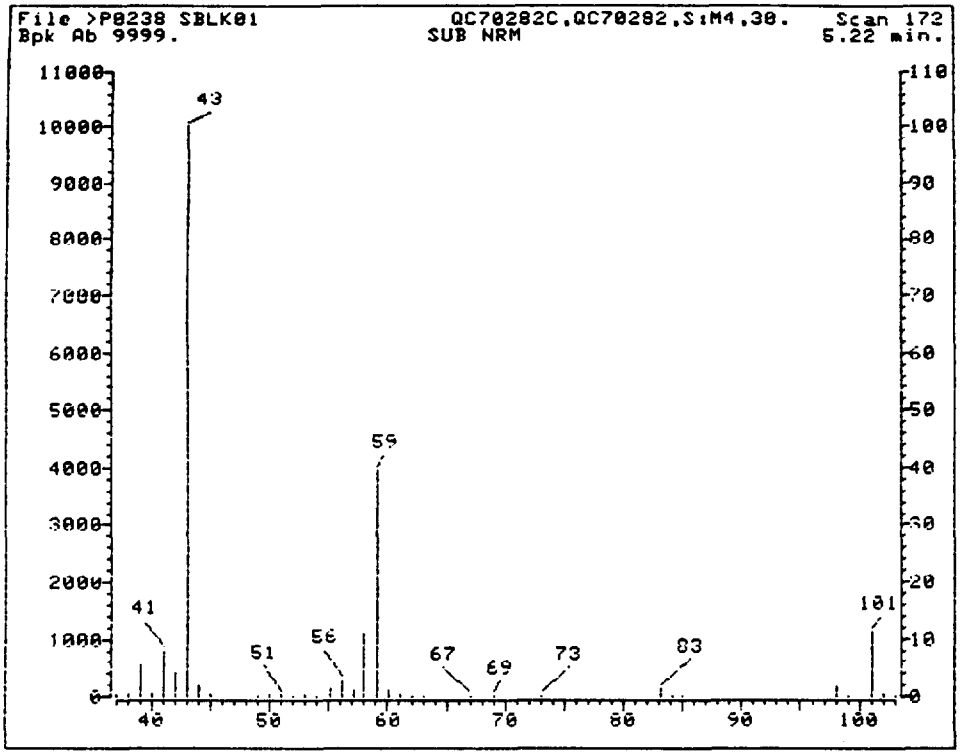


SAMPLE SPECTRUM (UNALTERED)



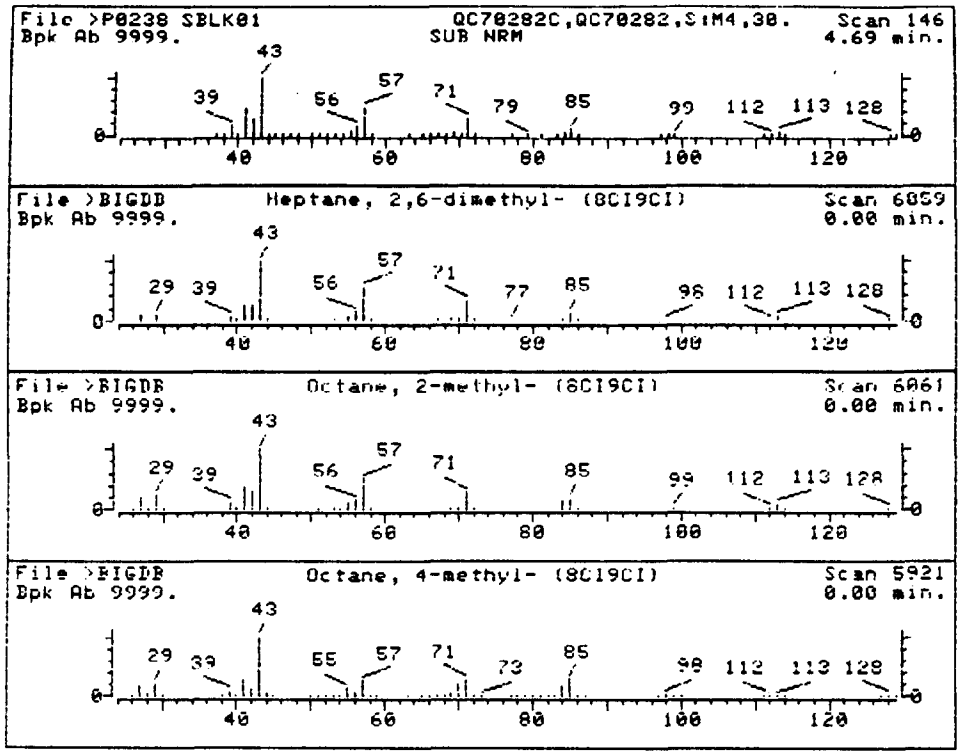
Data File: >P0238::U6 Quant Output File: ^P0238::AQ
Name: SBLK01
Misc: QC70282C,QC70282,S:M4,30.00,1 BTL#18
Quant Time: 901025 12:55 Quant ID File: IP0092::PF
Injected at: 901020 03:24 Last Calibration: 901022 14:02
Last Qcal Time: 901020 01:47

Compound No : 20
Compound Name : Isophorone
Scan Number : 499
Retention Time: 11.87 min.
Quant Ion : 82.0
Area : 22697
Concentration : 3.26 UG/ML
q-value : 93



Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 5.22
Scan: 172
Area: 3702218 Rank: 1
Semi-quantitative Conc (uncorrected): 313.10 UG/ML
Semi-quantitative Conc (corrected): 10436.68 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

No PBM hits for this scan.



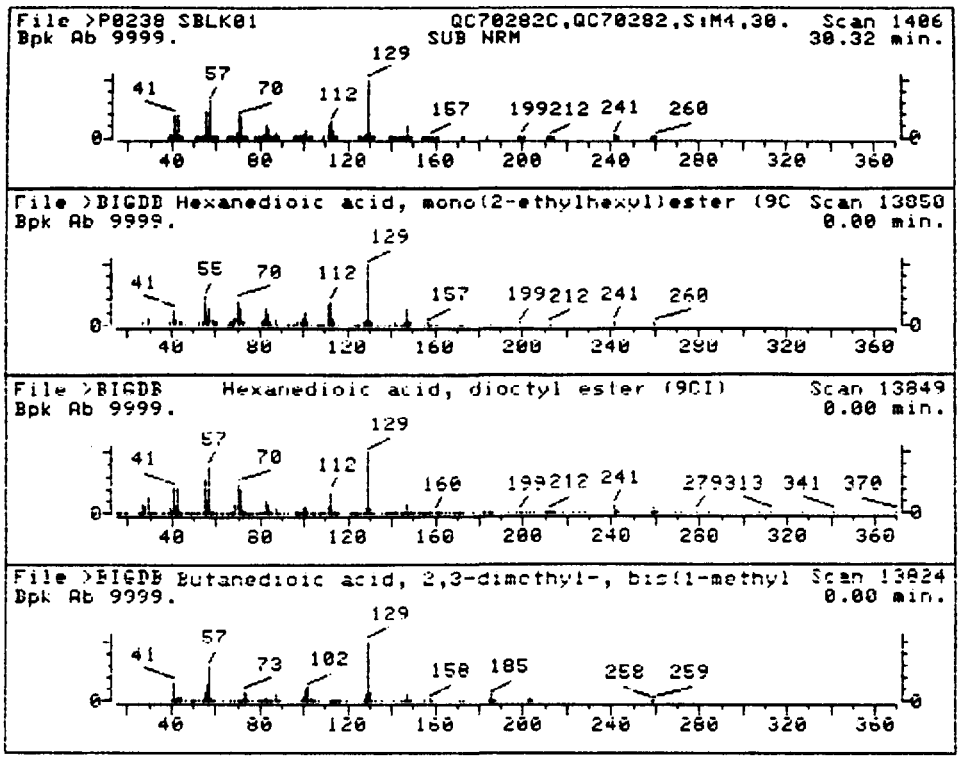
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 4.69
Scan: 146
Area: 1934203 Rank: 2
Semi-quantitative Conc (uncorrected): 163.58 UG/ML
Semi-quantitative Conc (corrected): 5452.59 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,6-dimethyl- (8CI9CI)	128	C9H20
2.	Octane, 2-methyl- (8CI9CI)	128	C9H20
3.	Octane, 4-methyl- (8CI9CI)	128	C9H20

Sample file: >P0238 Spectrum #: 146
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	93*	1072055	6059	"BIGDB	71	21	0	0	70	0	68	89
2.	70*	3221612	6061	"BIGDB	44	51	3	0	95	8	42	14
3.	60*	2216344	5921	"BIGDB	26	65	3	0	100	15	30	13



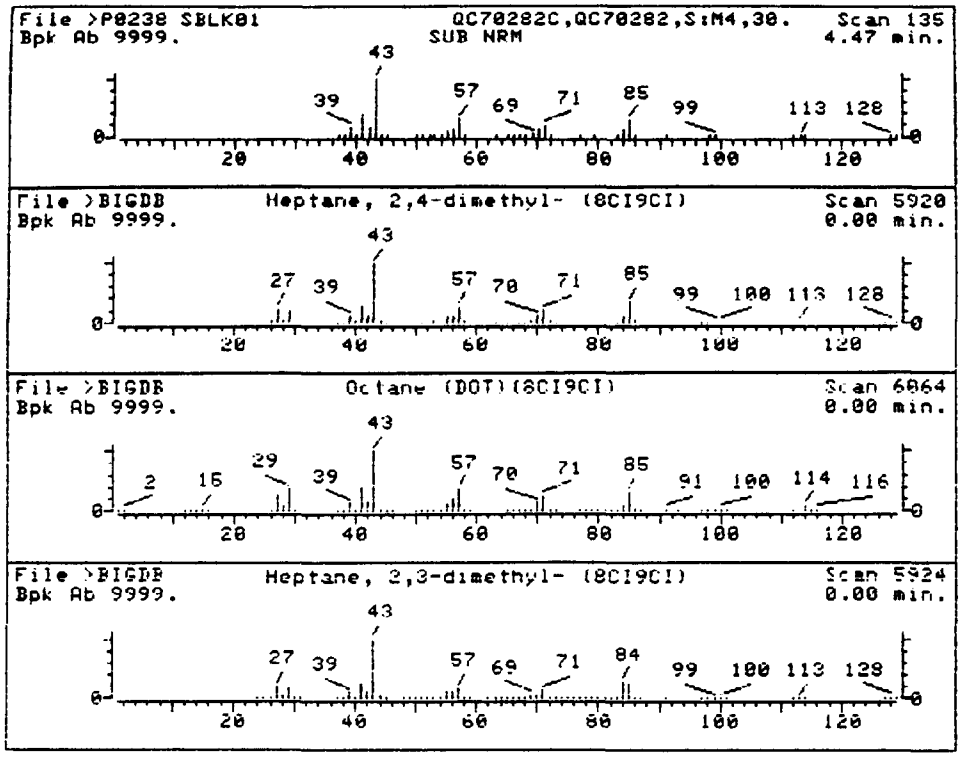
Data File: >P0238::U6
Name: SBLKU1
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 30.32
Scan: 1406
Area: 1721173 Rank: 3
Semi-quantitative Conc (uncorrected): 157.64 UG/ML
Semi-quantitative Conc (corrected): 5254.63 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Hexanedioic acid, mono(2-ethylhexyl)ester (9CI)	258	C14H26O4
2.	Hexanedioic acid, dioctyl ester (9CI)	370	C22H42O4
3.	Butanedioic acid, 2,3-dimethyl-, bis(1-methylpropyl) ester (9CI)	258	C14H26O4

Sample file: >P0238 Spectrum #: 1406
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	71	4337659	13850	"BIGDB	93	52	0	0	56	27	29	67
2.	60	123795	13849	"BIGDB	122	42	1	1	59	43	18	65
3.	25*	57983296	13824	"BIGDB	23	112	3	0	100	47	7	12



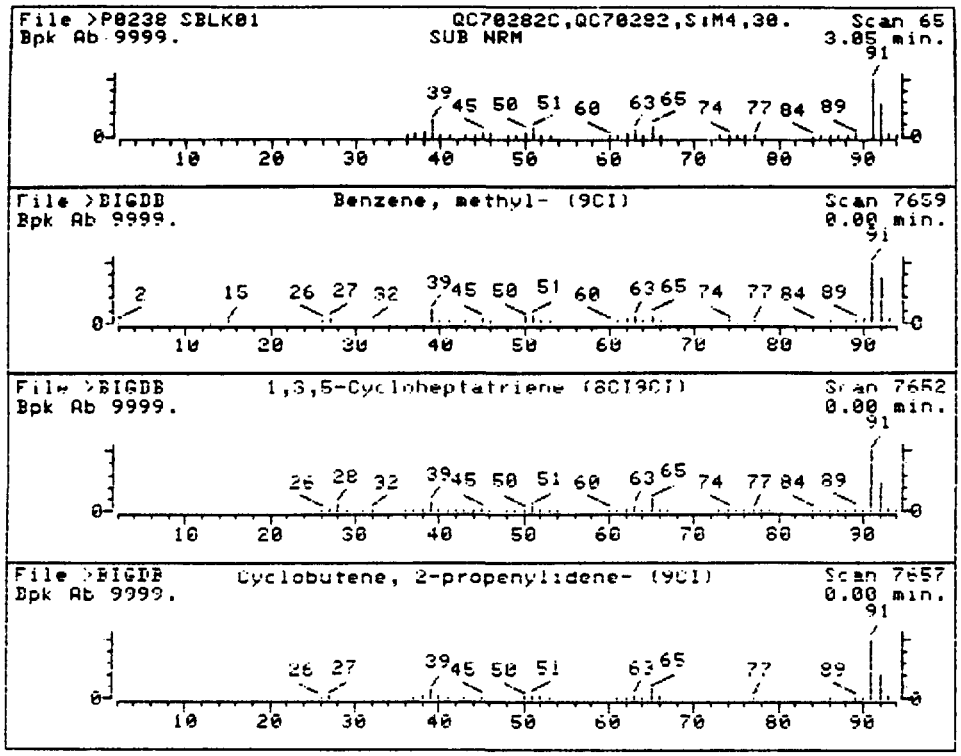
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 4.47
Scan: 135
Area: 1299848 Rank: 6
Semi-quantitative Conc (uncorrected): 109.93 UG/ML
Semi-quantitative Conc (corrected): 3664.32 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Heptane, 2,4-dimethyl- (8CI9CI)	128 C9H20
2.	Octane (DOT)(8CI9CI)	114 C8H18
3.	Heptane, 2,3-dimethyl- (8CI9CI)	128 C9H20

Sample file: >P0238 Spectrum #: 135
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	2213232	5920	"BIGDB	80	12	0	0	83	1	72	95
2.	79	111659	6064	"BIGDB	67	26	1	0	66	6	48	52
3.	74*	3074713	5924	"BIGDB	53	38	1	0	82	15	39	41

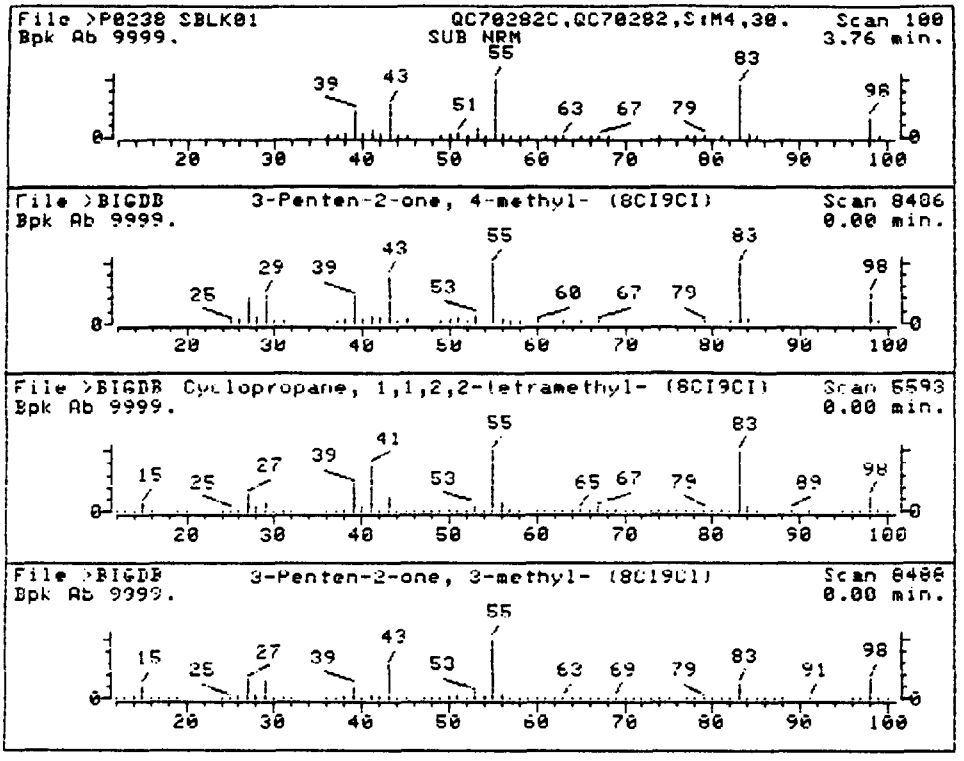


Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 3.05
Scan: 65
Area: 804795 Rank: 10
Semi-quantitative Conc (uncorrected): 68.06 UG/ML
Semi-quantitative Conc (corrected): 2268.75 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3
1. Benzene, methyl- (9CI) 92 C7H8
2. 1,3,5-Cycloheptatriene (8CI9CI) 92 C7H8
3. Cyclobutene, 2-propenylidene- (9CI) 92 C7H8

Sample file: >P0238 Spectrum #: 65
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	93*	108883	7659	"BIGDB	75	15	1	0	70	4	68	89
2.	76*	544252	7652	"BIGDB	44	41	1	0	88	8	45	26
3.	70*	52097855	7657	"BIGDB	46	33	2	1	100	8	42	19



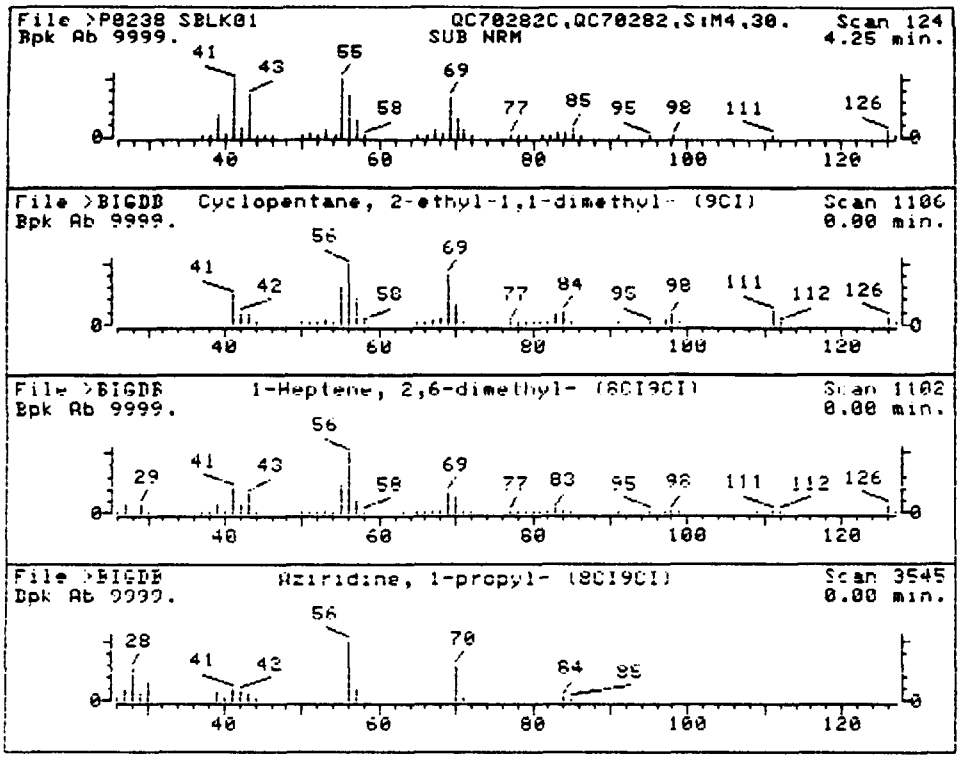
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 3.76
Scan: 100
Area: 406027 Rank: 12
Semi-quantitative Conc (uncorrected): 34.34 UG/ML
Semi-quantitative Conc (corrected): 1144.60 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	3-Penten-2-one, 4-methyl- (8CI9CI)	98	C6H10O
2.	Cyclopropane, 1,1,2,2-tetramethyl- (8CI9CI)	98	C7H14
3.	3-Penten-2-one, 3-methyl- (8CI9CI)	98	C6H10O

Sample File: >P0238 Spectrum #: 1000
Search speed: 1 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	141797	8486	"BIGDB	72	26	1	0	70	2	66	21
2.	78*	4127473	6593	"BIGDB	43	54	2	0	91	5	55	19
3.	67*	565628	8488	"BIGDB	62	30	0	0	76	42	24	74

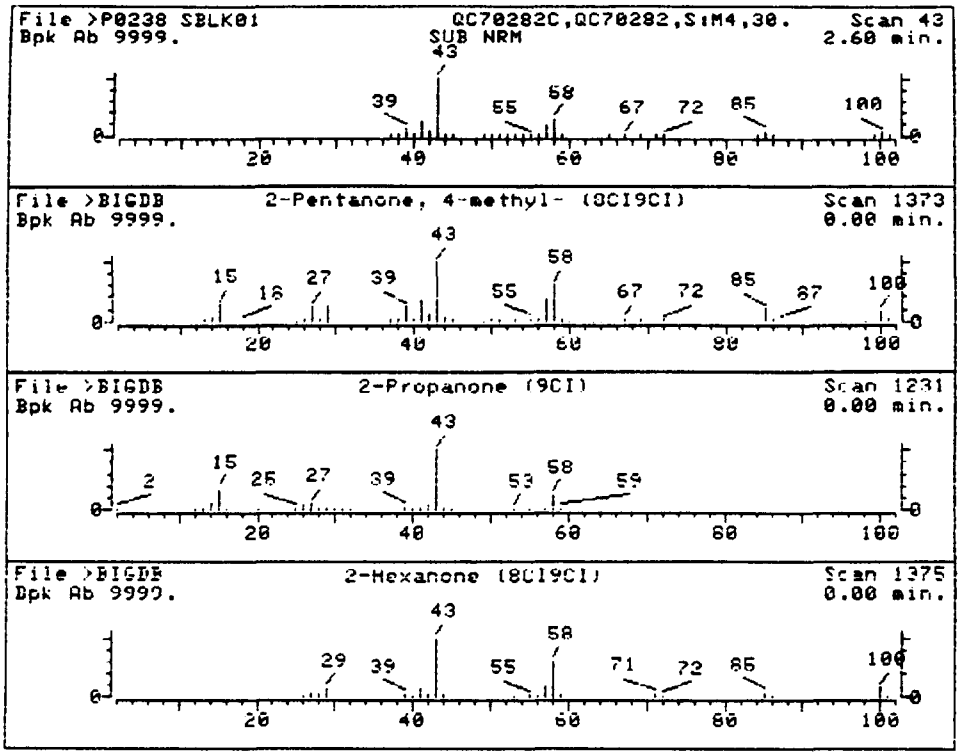


Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 4.25
Scan: 124
Area: 338318 Rank: 13
Semi-quantitative Conc (uncorrected): 28.61 UG/ML
Semi-quantitative Conc (corrected): 953.73 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3
1. Cyclopentane, 2-ethyl-1,1-dimethyl- (9CI) 126 C9H18
2. 1-Heptene, 2,6-dimethyl- (8CI9CI) 126 C9H18
3. Aziridine, 1-propyl- (8CI9CI) 85 C5H11N

Sample File: >P0238 Spectrum #: 124
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IO
1.	42*	54549803	1106	"BIGDB	44	65	3	0	69	23	17	13
2.	39*	30747811	1102	"BIGDB	30	62	1	0	69	30	14	16
3.	32*	5536981	3545	"BIGDB	28	59	1	0	54	34	12	15



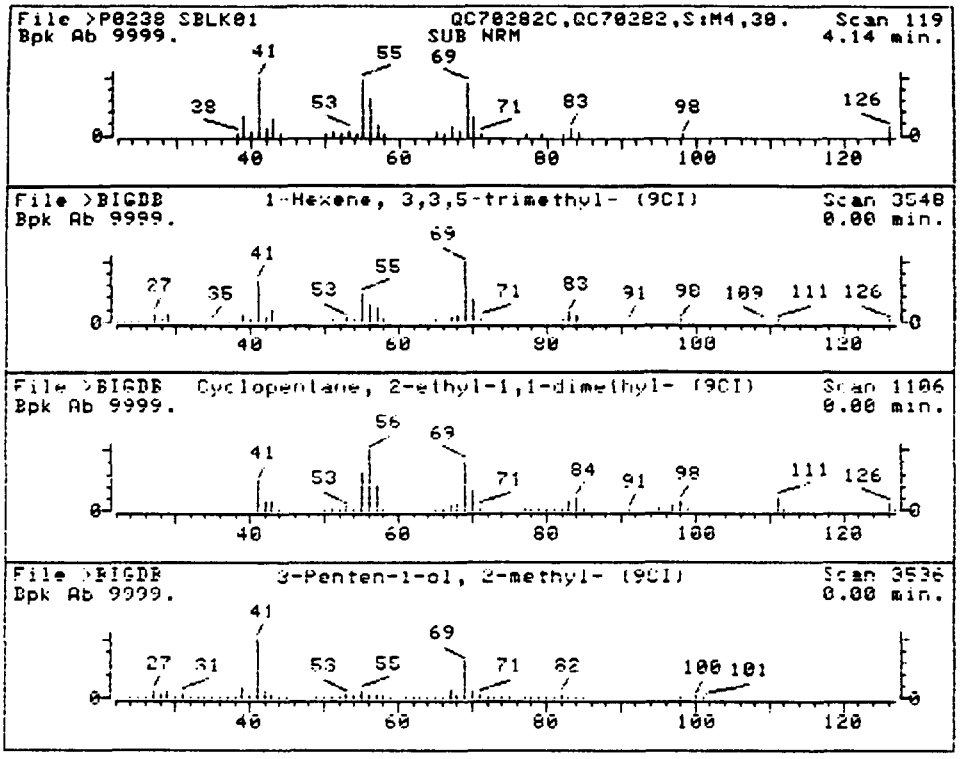
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 2.60
Scan: 43
Area: 159046 Rank: 14
Semi-quantitative Conc (uncorrected): 13.45 UG/ML
Semi-quantitative Conc (corrected): 448.36 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	2-Pentanone, 4-methyl- (8CI9CI)	100 C6H12O
2.	2-Propanone (9CI)	58 C3H6O
3.	2-Hexanone (8CI9CI)	100 C6H12O

Sample file: >P0238 Spectrum #: 43
Search speed: 1 Tilting option: S No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	68*	108101	1373	"BIGDB	57	23	0	0	35	47	20	78
2.	38*	67641	1231	"BIGDB	21	50	0	0	96	27	14	15
3.	28*	591786	1375	"BIGDB	30	38	1	0	38	43	8	16



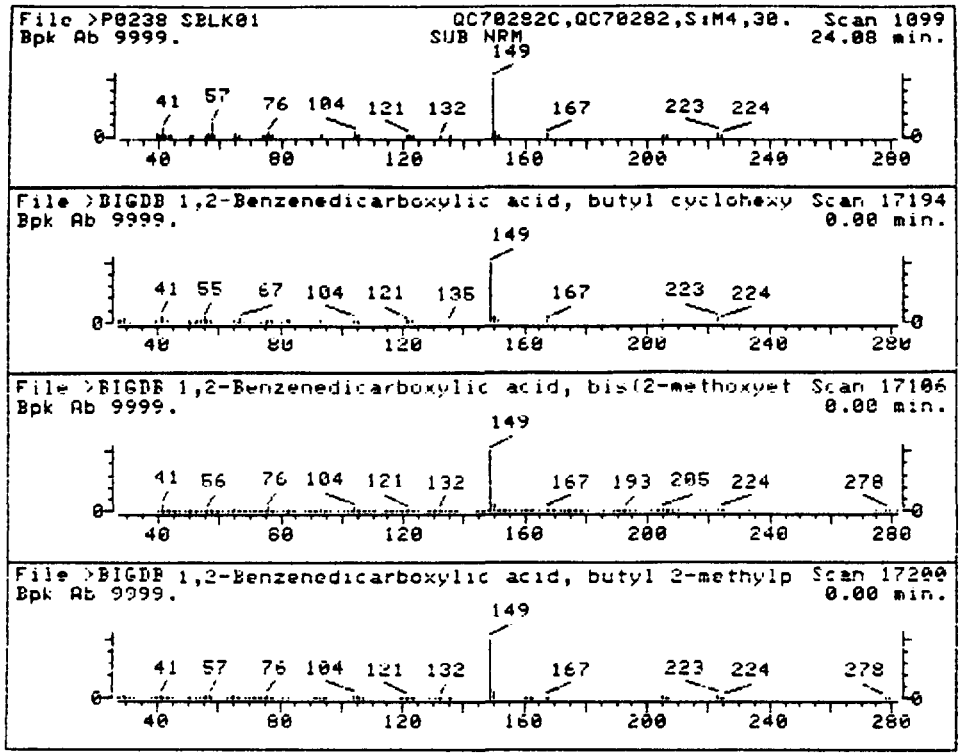
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 4.14
Scan: 119
Area: 118181 Rank: 15
Semi-quantitative Conc (uncorrected): 9.99 UG/ML
Semi-quantitative Conc (corrected): 333.16 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1. 1-Hexene, 3,3,5-trimethyl- (9CI) 126 C9H18
2. Cyclopentane, 2-ethyl-1,1-dimethyl- (9CI) 126 C9H18
3. 3-Penten-1-ol, 2-methyl- (9CI) 100 C6H12O

Sample file: >P0238 Spectrum #: 119
Search speed: 1 Tilting option: S No. of ion ranges searched: 47

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	68*	13427435	3548	"BIGDB	40	53	1	0	80	20	25	23
2.	30*	54549803	1106	"BIGDB	34	75	3	0	64	31	12	13
3.	26	62238373	3536	"BIGDB	35	49	2	0	100	36	10	12

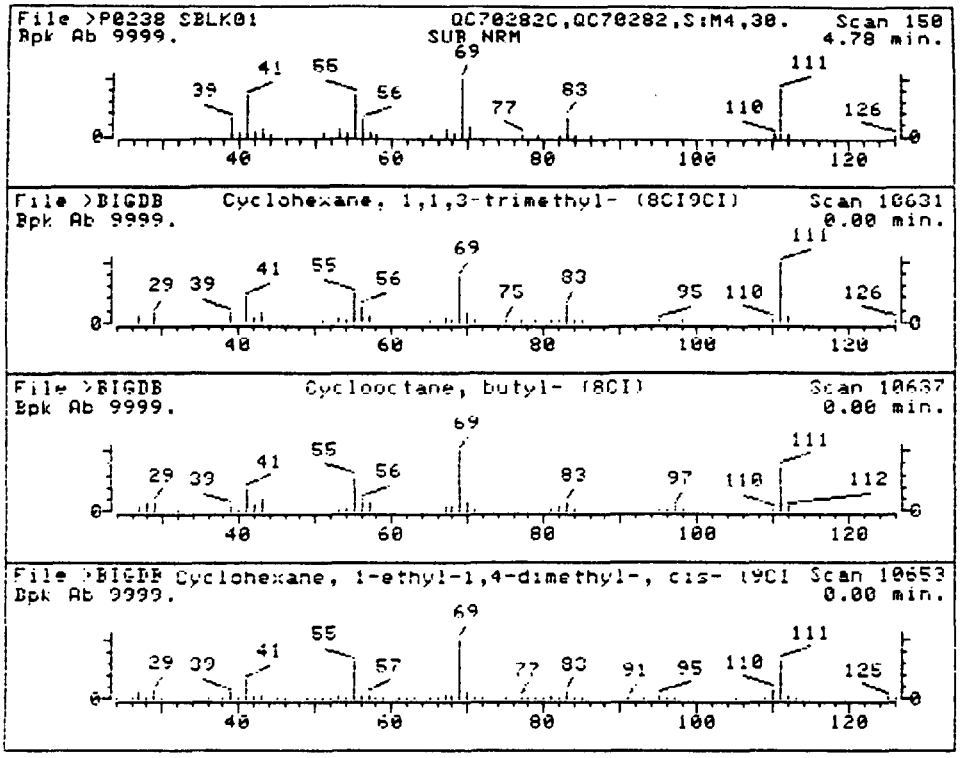


Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 24.08
Scan: 1099
Area: 90114 Rank: 16
Semi-quantitative Conc (uncorrected): 4.54 UG/ML
Semi-quantitative Conc (corrected): 151.49 ug/kg
Calculated using Istd: d10-Phenanthrene @ 22.88 minutes

#ru,PRE ,,PBR183,,,1,3
1. 1,2-Benzenedicarboxylic acid, butyl cyclohexyl ester (9CI) 304 C18H2404
2. 1,2-Benzenedicarboxylic acid, bis(2-methoxyethyl) ester (9CI) 282 C14H1806
3. 1,2-Benzenedicarboxylic acid, butyl 2-methylpropyl ester (9CI) 278 C16H2204

Sample File: >P0238 Spectrum #: 1099
Search speed: 1 Tilting option: S No. of inn ranges searched: 48

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	78	84640	17194	"BIGDB	60	48	2	0	100	2	55	12
2.	35	117828	17106	"BIGDB	73	29	1	2	60	47	11	30
3.	31	17851535	17200	"BIGDB	68	38	1	2	63	45	8	19



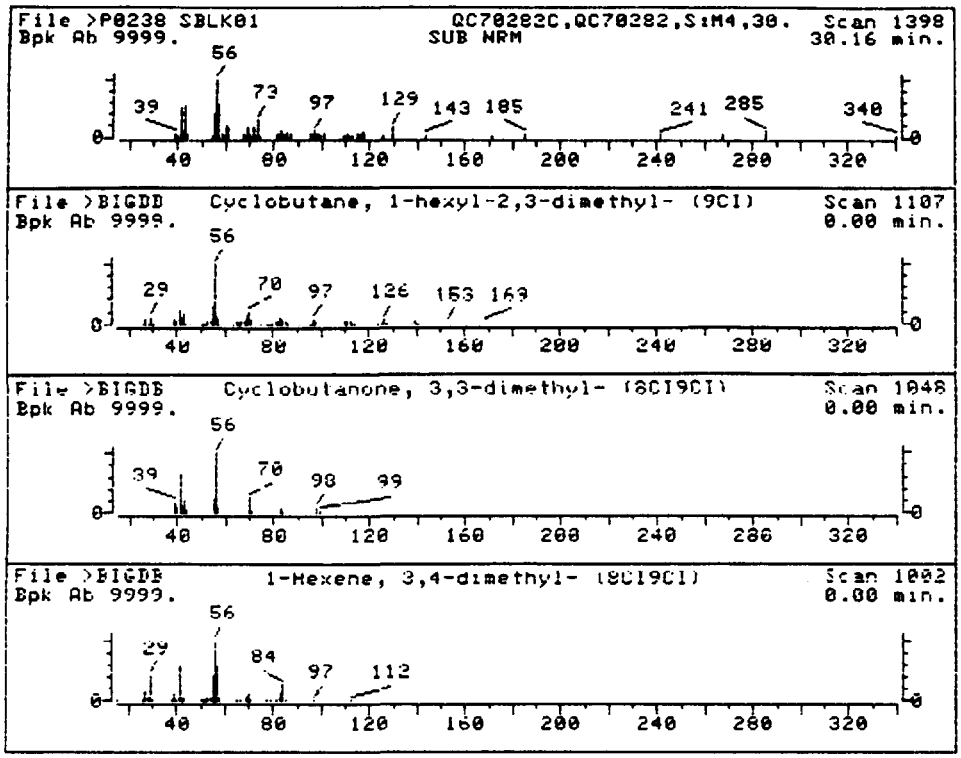
Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 4.78
Scan: 150
Area: 77061 Rank: 17
Semi-quantitative Conc (uncorrected): 6.52 UG/ML
Semi-quantitative Conc (corrected): 217.24 ug/kg
Calculated using Istd: d4-1,4-Dichlorobenzene @ 9.33 minutes

#ru,PRE ,,PBR183,,,1,3

1.	Cyclohexane, 1,1,3-trimethyl- (8CI9CI)	126 C9H18
2.	Cyclooctane, butyl- (8CI)	168 C12H24
3.	Cyclohexane, 1-ethyl-1,4-dimethyl-, cis- (9CI)	140 C10H20

Sample File: >P0238 Spectrum #: 150
Search speed: 1 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	28*	3073663	10631	"BIGDB	56	43	3	1	94	3	55	18
2.	20	16538935	10637	"BIGDB	54	41	2	1	97	7	42	12
3.	60	62238306	10653	"BIGDB	47	48	2	0	100	13	30	12



Data File: >P0238::U6
Name: SBLK01
Misc Data: QC70282C,QC70282,S:M4,30.00,1 BTL#18
RT (min): 30.16
Scan: 1398
Area: 62100 Rank: 19
Semi-quantitative Conc (uncorrected): 5.69 UG/ML
Semi-quantitative Conc (corrected): 189.59 ug/kg
Calculated using Istd: d12-Chrysene @ 31.01 minutes

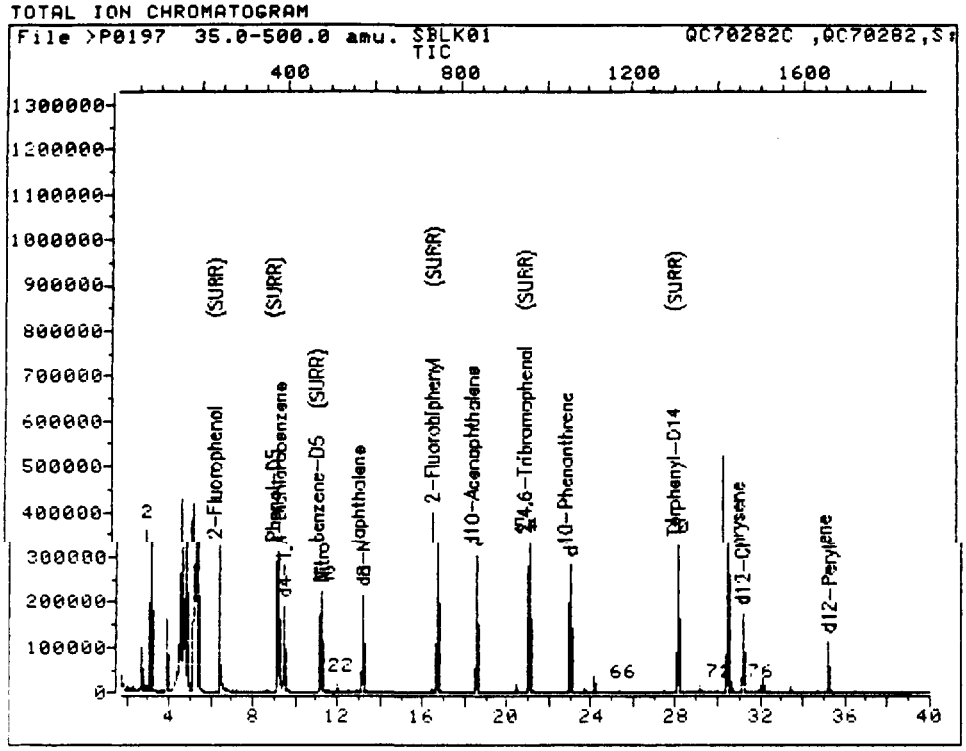
#ru,PRF ,,PBR183,,,1,3

1.	Cyclobutane, 1-hexyl-2,3-dimethyl- (9CI)	168	C12H24
2.	Cyclobutanone, 3,3-dimethyl- (8CI9CI)	98	C6H10O
3.	1-Hexene, 3,4-dimethyl- (8CI9CI)	112	C8H16

Sample File: >P0238 Spectrum #: 1398
Search speed: 1 Tilting option: S No. of ion ranges searched: 48

	Prob.	CAS #	CON #	ROUT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	25	55120848	1107	"BIGDB	41	47	2	0	100	48	7	13
2.	25*	1192332	1048	"BIGDB	33	45	2	0	78	48	7	16
3.	25*	16745941	1002	"BIGDB	33	57	2	0	89	48	7	16

TOTAL ION CHROMATOGRAM



Data File: >P0197::U5 Quant Output File: ^P0197::VL
Name: SBLK01
Misc: QC70282C ,QC70282,S:M4,30.00,1 BTL# 7

Id File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

Operator ID: KV0786
Quant Time: 901019 16:04
Injected at: 901017 17:26

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901019 16:04
Output File: ^P0197::VL Injected at: 901017 17:26
Data File: >P0197::U5 Dilution Factor: 1.00000
Name: SBLK01
Misc: QC70282C ,QC70282,S:M4,30.00,1 BTL# 7

ID File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.43	379	133786	40.00	UG/ML	91
2)	N-Nitrosodimethylamine		3.13	69	4801	~~3.62~~	~~UG/ML~~	100
3)	2-Fluorophenol	(SURR)	6.34	227	343174	168.41	UG/ML	82
5)	Phenol-D5	(SURR)	9.15	365	541226	209.79	UG/ML	92
12)	N-Nitrosodi-n-propylamine		11.18	465	35435	~~19.81~~	~~UG/ML~~	38
18)	*d8-Naphthalene		13.16	562	313802	40.00	UG/ML	94
20)	Nitrobenzene-D5	(SURR)	11.18	465	238786	78.57	UG/ML	94
22)	Isophorone		11.98	504	23869	3.93	UG/ML	96
35)	*d10-Acenaphthalene		18.52	826	194291	40.00	UG/ML	96
39)	2-Fluorobiphenyl	(SURR)	16.65	734	430575	70.68	UG/ML	99
54)	Fluorene		21.03	949	8779	~~1.55~~	~~UG/ML~~	81
56)	2,4,6-Tribromophenol	(SURR)	21.03	949	127963	204.70	UG/ML	98
58)	*d10-Phenanthrene		22.98	1045	322782	40.00	UG/ML	99
66)	Di-n-butyl phthalate		25.38	1163	9834	~~.925~~	~~UG/ML~~	96
69)	*d12-Chrysene		31.13	1446	183930	40.00	UG/ML	96
70)	Benzidine		28.12	1298	4897	~~3.98~~	~~UG/ML~~	100
71)	Terphenyl-D14	(SURR)	28.12	1298	417748	73.06	UG/ML	93
72)	Butyl benzyl phthalate		29.91	1386	2365	~~.549~~	~~UG/ML~~	93
76)	bis(2-Ethylhexyl)phthalate		31.91	1484	3220	~~.601~~	~~UG/ML~~	96
77)	*d12-Perylene		35.20	1646	127078	40.00	UG/ML	98

Compound is ISTD

CP
10 30 90

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720MS

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720CS

Sample wt/vol: ~~25.2~~ 30 (g/mL) G Lab File ID: >P0241

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 9/6 dec. 0 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: ~~32767~~ 1 (D) 10-56 %

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4700	
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	4400	
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	2500	
100-51-6	Benzyl alcohol	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	bis(2-Chloroisopropyl)ether	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	3100	
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	81	JB
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
65-85-0	Benzoic acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	2500	
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	5500	
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	2900	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720MS

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720CS

Sample wt/vol: ~~25.2~~ 30 (g/mL) G Lab File ID: >P0241

Level: (low/med) LOW Date Received: 10/10/90

% Moisture: not dec. 816 dec. 0 Date Extracted: 10/11/90

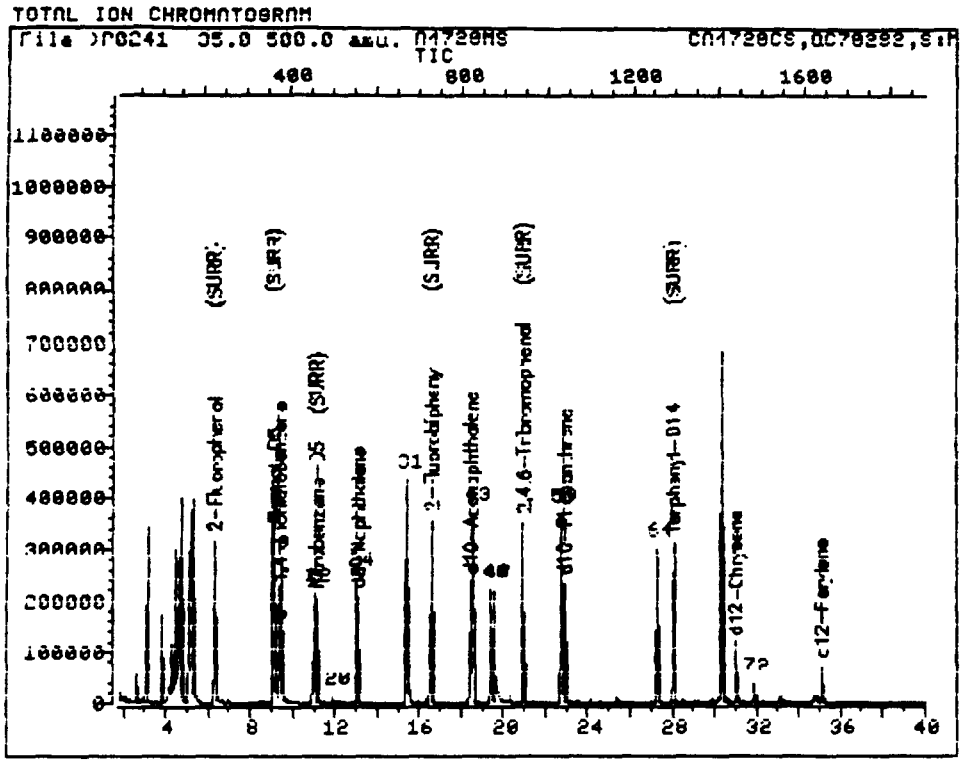
Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1 ~~32767~~

CA 10 30 90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	2500	
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	16000	
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	2900	
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	5600	
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	2900	
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	790	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	220	J
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine



Data File: >P0241::U5 Quant Output File: ^P0241::AQ
Name: A4720MS
Misc: CA4720CS,QC70282,S:M4,25.23,1 BTL#21

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

Operator ID: KV0786
Quant Time : 901025 12:42
Injected at: 901020 05:50

QUANT REPORT Page 1

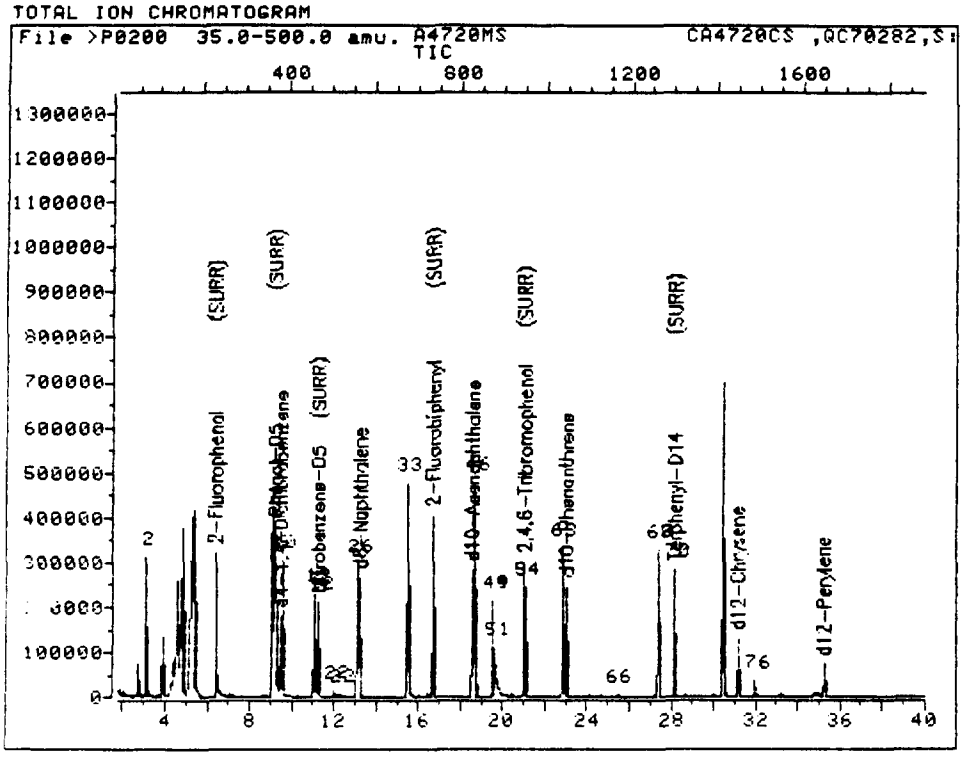
Operator ID: KV0786 Quant Rev: 7 Quant Time: 901025 12:42
Output File: ^P0241::AQ Injected at: 901020 05:50
Data File: >P0241::U5 Dilution Factor: 1.00000
Name: A4720MS
Misc: CA4720CS,QC70282,S:M4,25.23,1 BTL#21

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.33	374	71995	40.00	UG/ML	92
3)	2-Fluorophenol	(SURR)	6.26	223	301656	151.04	UG/ML	99
5)	Phenol-D5	(SURR)	9.09	362	384726	153.18	UG/ML	95
6)	Phenol		9.13	364	394934	118.15	UG/ML	93
7)	2-Chlorophenol		8.97	356	315963	110.44	UG/ML	83
9)	1,4-Dichlorobenzene		9.39	377	165489	63.36	UG/ML	96
12)	N-Nitrosodi-n-propylamine		10.98	455	199175	76.97	UG/ML	56
17)	*d8-Naphthalene		13.08	558	298097	40.00	UG/ML	95
18)	Nitrobenzene-D5	(SURR)	11.10	461	248621	68.62	UG/ML	92
20)	Isophorone		11.88	499	15234	2.04	UG/ML	96
24)	1,2,4-Trichlorobenzene		13.01	555	185757	62.78	UG/ML	94
31)	p-Chloro-m-cresol		15.35	670	370586	138.89	UG/ML	100
32)	*d10-Acenaphthalene		18.43	821	190664	40.00	UG/ML	97
36)	2-Fluorobiphenyl	(SURR)	16.57	730	389523	64.67	UG/ML	99
41)	2,6-Dinitrotoluene		19.38	868	160817	72.97	UG/ML	79
43)	Acenaphthene		18.55	827	360844	62.51	UG/ML	98
46)	2,4-Dinitrotoluene		19.38	868	160817	72.97	UG/ML	93
47)	4-Nitrophenol		19.54	876	198508	396.46	UG/ML	100
52)	2,4,6-Tribromophenol	(SURR)	20.93	944	174829	163.71	UG/ML	98
54)	*d10-Phenanthrene		22.88	1040	317928	40.00	UG/ML	98
59)	Pentachlorophenol		22.70	1031	164072	140.41	UG/ML	94
64)	Pyrene		27.23	1254	513018	72.72	UG/ML	95
65)	*d12-Chrysene		31.00	1439	151226	40.00	UG/ML	98
67)	Terphenyl-D14	(SURR)	28.03	1293	412505	72.56	UG/ML	93
72)	bis(2-Ethylhexyl)phthalate		31.79	1478	28430	5.62	UG/ML	98
73)	*d12-Perylene		35.07	1639	90017	40.00	UG/ML	86

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >P0200::U5 Quant Output File: ^P0200::VL
Name: A4720MS
Misc: CA4720CS ,QC70282,S:M4,25.23,1 BTL#10

Id File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

Operator ID: KV0786
Quant Time: 901019 16:09
Injected at: 901017 19:51

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901019 16:09
Output File: ^P0200::VL Injected at: 901017 19:51
Data File: >P0200::U5 Dilution Factor: 1.00000
Name: A4720MS
Misc: CA4720CS ,QC70282,S:M4,25.23,1 BTL#10

ID File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.44	379	151986	40.00	UG/ML	89
2)	N-Nitrosodimethylamine		3.11	68	4638	~~3.08~~	~~UG/ML~~	100
3)	2-Fluorophenol	(SURR)	6.35	227	329351	142.27	UG/ML	83
5)	Phenol-D5	(SURR)	9.17	366	459339	156.72	UG/ML	95
6)	Phenol		9.21	368	438161	144.98	UG/ML	86
7)	2-Chlorophenol		9.07	361	389335	138.00	UG/ML	91
8)	1,3-Dichlorobenzene		9.50	382	197651	~~67.30~~	~~UG/ML~~	91
9)	1,4-Dichlorobenzene		9.50	382	197651	66.47	UG/ML	97
10)	1,2-Dichlorobenzene		9.50	382	197651	~~62.98~~	~~UG/ML~~	98
12)	N-Nitrosodi-n-propylamine		11.07	459	191330	90.35	UG/ML	66
12)	N-Nitrosodi-n-propylamine		11.21	466	36897	~~17.42~~	~~UG/ML~~	39
18)	*d8-Naphthalene		13.18	563	320604	40.00	UG/ML	94
20)	Nitrobenzene-D5	(SURR)	11.21	466	248344	79.98	UG/ML	92
22)	Isophorone		11.98	504	16583	2.67	UG/ML	97
22)	Isophorone		12.23	516	7791	~~1.26~~	~~UG/ML~~	98
26)	1,2,4-Trichlorobenzene		13.12	560	208627	72.75	UG/ML	94
33)	p-Chloro-m-cresol		15.44	674	388855	161.82	UG/ML	93
35)	*d10-Acenaphthalene		18.53	826	201598	40.00	UG/ML	99
39)	2-Fluorobiphenyl	(SURR)	16.66	734	441631	69.87	UG/ML	99
44)	2,6-Dinitrotoluene		19.47	872	142958	75.72	UG/ML	78
46)	Acenaphthene		18.65	832	394477	65.12	UG/ML	98
49)	2,4-Dinitrotoluene		19.47	872	142958	75.72	UG/ML	85
51)	4-Nitrophenol		19.61	879	119379	250.22	UG/ML	100
54)	Fluorene		21.04	949	8600	~~1.46~~	~~UG/ML~~	93
56)	2,4,6-Tribromophenol	(SURR)	21.01	948	117649	181.38	UG/ML	96
58)	*d10-Phenanthrene		22.99	1045	268531	40.00	UG/ML	98
63)	Pentachlorophenol		22.78	1035	140737	179.37	UG/ML	95
66)	Di-n-butyl phthalate		25.39	1163	5475	~~.619~~	~~UG/ML~~	98
67)	Fluoranthene		27.34	1259	469043	~~83.46~~	~~UG/ML~~	97
68)	Pyrene		27.34	1259	469043	84.77	UG/ML	97
69)	*d12-Chrysene		31.12	1445	145090	40.00	UG/ML	96
70)	Benzidine		28.13	1298	3874	~~4.00~~	~~UG/ML~~	100
71)	Terphenyl-D14	(SURR)	28.13	1298	332679	73.75	UG/ML	92
76)	bis(2-Ethylhexyl)phthalate		31.92	1484	25145	5.95	UG/ML	98
77)	*d12-Perylene		35.19	1645	95336	40.00	UG/ML	94

* Compound is ISTD

EA
10-30-90.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720MSD

Lab Name: ETCNJ Contract: _____

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720CR

Sample wt/vol: ~~25.3~~ 30 (g/mL) G Lab File ID: >P0242

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 816 dec. 0 Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: ~~3276~~ 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	4900	
111-44-4	bis(2-Chloroethyl)ether	400	U
95-57-8	2-Chlorophenol	4600	
541-73-1	1,3-Dichlorobenzene	400	U
106-46-7	1,4-Dichlorobenzene	2600	
100-51-6	Benzyl alcohol	400	U
95-50-1	1,2-Dichlorobenzene	400	U
95-48-7	2-Methylphenol	400	U
108-60-1	bis(2-Chloroisopropyl)ether	400	U
106-44-5	4-Methylphenol	400	U
621-64-7	N-Nitroso-di-n-propylamine	2200	
67-72-1	Hexachloroethane	400	U
98-95-3	Nitrobenzene	400	U
78-59-1	Isophorone	83	JB
88-75-5	2-Nitrophenol	400	U
105-67-9	2,4-Dimethylphenol	400	U
65-85-0	Benzoic acid	2000	U
111-91-1	bis(2-Chloroethoxy)methane	400	U
120-83-2	2,4-Dichlorophenol	400	U
120-82-1	1,2,4-Trichlorobenzene	2600	
91-20-3	Naphthalene	400	U
106-47-8	4-Chloroaniline	400	U
87-68-3	Hexachlorobutadiene	400	U
59-50-7	4-Chloro-3-methylphenol	5700	
91-57-6	2-Methylnaphthalene	400	U
77-47-4	Hexachlorocyclopentadiene	400	U
88-06-2	2,4,6-Trichlorophenol	400	U
95-95-4	2,4,5-Trichlorophenol	2000	U
91-58-7	2-Chloronaphthalene	400	U
88-74-4	2-Nitroaniline	2000	U
131-11-3	Dimethylphthalate	400	U
208-96-8	Acenaphthylene	400	U
606-20-2	2,6-Dinitrotoluene	2900	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

A4720MSD

Lab Name: ETCNJ Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: CA4720CR

Sample wt/vol: ~~25.3~~30 (g/mL) G Lab File ID: >P0242

Level: (low/med) LOW Date Received: 10/01/90

% Moisture: not dec. 81 dec. 0 Date Extracted: 10/11/90

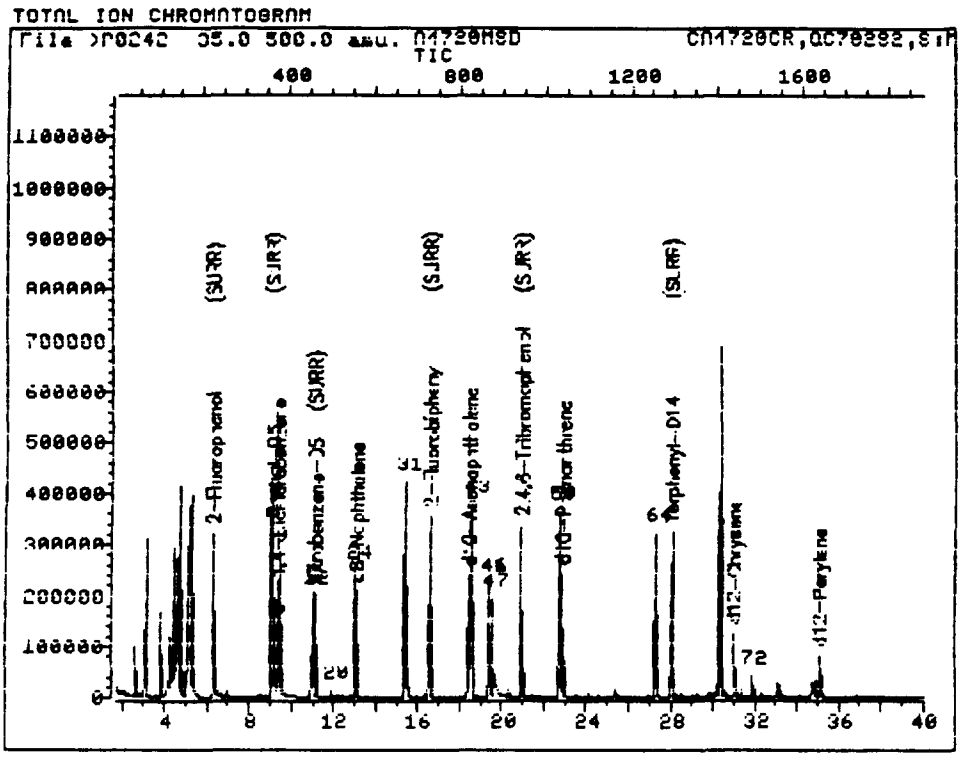
Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/20/90

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: ~~32767~~ 1

(A) 10-30-90

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	2000	U
83-32-9	Acenaphthene	2500	
51-28-5	2,4-Dinitrophenol	2000	U
100-02-7	4-Nitrophenol	15000	
132-64-9	Dibenzofuran	400	U
121-14-2	2,4-Dinitrotoluene	2900	
84-66-2	Diethylphthalate	400	U
7005-72-3	4-Chlorophenyl-phenylether	400	U
86-73-7	Fluorene	400	U
100-01-6	4-Nitroaniline	2000	U
534-52-1	4,6-Dinitro-2-methylphenol	2000	U
86-30-6	N-Nitrosodiphenylamine (1)	400	U
101-55-3	4-Bromophenyl-phenylether	400	U
118-74-1	Hexachlorobenzene	400	U
87-86-5	Pentachlorophenol	6300	
85-01-8	Phenanthrene	400	U
120-12-7	Anthracene	400	U
84-74-2	Di-n-butylphthalate	400	U
206-44-0	Fluoranthene	400	U
129-00-0	Pyrene	3400	
85-68-7	Butylbenzylphthalate	400	U
91-94-1	3,3'-Dichlorobenzidine	790	U
56-55-3	Benzo(a)anthracene	400	U
218-01-9	Chrysene	400	U
117-81-7	bis(2-Ethylhexyl)phthalate	210	J
117-84-0	Di-n-octylphthalate	400	U
205-99-2	Benzo(b)fluoranthene	400	U
207-08-9	Benzo(k)fluoranthene	400	U
50-32-8	Benzo(a)pyrene	400	U
193-39-5	Indeno(1,2,3-cd)pyrene	400	U
53-70-3	Dibenz(a,h)anthracene	400	U
191-24-2	Benzo(g,h,i)perylene	400	U

(1) - Cannot be separated from Diphenylamine



Data File: >P0242::U5 Quant Output File: ^P0242::AQ
Name: A4720MSD
Misc: CA4720CR,QC70282,S:M4,25.28,1 BTL#22

Id File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

Operator ID: KV0786
Quant Time : 901025 12:47
Injected at: 901020 06:39

QUANT REPORT Page 1

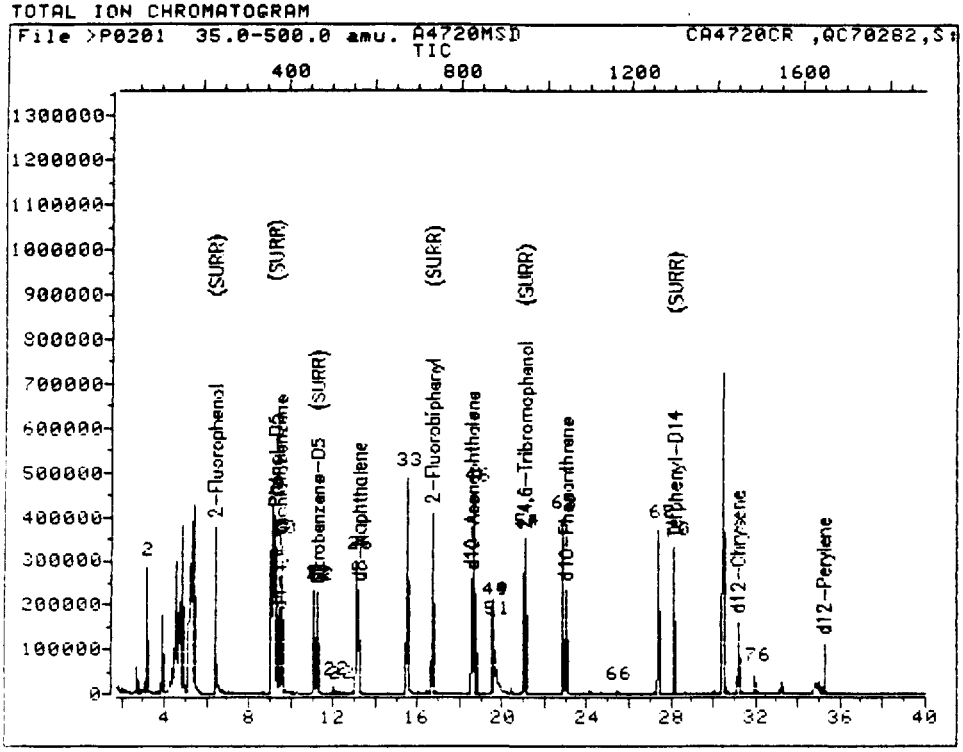
Operator ID: KV0786 Quant Rev: 7 Quant Time: 901025 12:47
Output File: ^P0242::AQ Injected at: 901020 06:39
Data File: >P0242::U5 Dilution Factor: 1.00000
Name: A4720MSD
Misc: CA4720CR,QC70282,S:M4,25.28,1 BTL#22

ID File: IP0092::PF
Title: IFB/BNA, PP/BNA, TCLBN1
Last Calibration: 901022 14:02 Last Qcal Time: 901020 01:47

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.33	374	69684	40.00	UG/ML	88
3)	2-Fluorophenol	(SURR)	6.26	223	289409	149.72	UG/ML	98
5)	Phenol-D5	(SURR)	9.09	362	434577	178.76	UG/ML	98
6)	Phenol		9.13	364	398363	123.12	UG/ML	90
7)	2-Chlorophenol		8.97	356	319129	115.24	UG/ML	84
9)	1,4-Dichlorobenzene		9.39	377	164362	65.01	UG/ML	97
12)	N-Nitrosodi-n-propylamine		10.96	454	137126	54.75	UG/ML	71
17)	*d8-Naphthalene		13.08	558	280477	40.00	UG/ML	95
18)	Nitrobenzene-D5	(SURR)	11.10	461	255534	74.95	UG/ML	91
20)	Isophorone		11.88	499	14829	2.11	UG/ML	97
24)	1,2,4-Trichlorobenzene		13.01	555	185486	66.63	UG/ML	96
31)	p-Chloro-m-cresol		15.35	670	363298	144.72	UG/ML	100
32)	*d10-Acenaphthalene		18.43	821	175947	40.00	UG/ML	99
36)	2-Fluorobiphenyl	(SURR)	16.57	730	394417	70.96	UG/ML	98
41)	2,6-Dinitrotoluene		19.38	868	148312	72.93	UG/ML	78
43)	Acenaphthene		18.55	827	338644	63.57	UG/ML	99
46)	2,4-Dinitrotoluene		19.38	868	148312	72.93	UG/ML	97
47)	4-Nitrophenol		19.52	875	176246	381.44	UG/ML	100
52)	2,4,6-Tribromophenol	(SURR)	20.93	944	170220	172.73	UG/ML	99
54)	*d10-Phenanthrene		22.88	1040	281667	40.00	UG/ML	98
59)	Pentachlorophenol		22.70	1031	165497	159.86	UG/ML	97
64)	Pyrene		27.24	1254	535135	85.62	UG/ML	96
65)	*d12-Chrysene		31.00	1439	161743	40.00	UG/ML	98
67)	Terphenyl-D14	(SURR)	28.03	1293	419639	69.01	UG/ML	92
72)	bis(2-Ethylhexyl)phthalate		31.79	1478	29091	5.38	UG/ML	94
73)	*d12-Perylene		35.07	1639	101499	40.00	UG/ML	84

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >P0201::U5 Quant Output File: ^P0201::VL
Name: A4720MSD
Misc: CA4720CR ,QC70282,S:M4,25.28,1 BTL#11

Id File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

Operator ID: KV0786
Quant Time: 901019 16:10
Injected at: 901017 20:39

QUANT REPORT Page 1

Operator ID: KV0786 Quant Rev: 7 Quant Time: 901019 16:10
Output File: ^P0201::VL Injected at: 901017 20:39
Data File: >P0201::U5 Dilution Factor: 1.00000
Name: A4720MSD
Misc: CA4720CR ,QC70282,S:M4,25.28,1 BTL#11

ID File: IP0091::VL
Title: PP/BNA, IFB/BNA
Last Calibration: 901018 10:36

	Compound		R.T.	Scan#	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene		9.43	379	155635	40.00	UG/ML	89
2)	N-Nitrosodimethylamine		3.11	68	4393	~~2.85~~	~~UG/ML~~	100
3)	2-Fluorophenol	(SURR)	6.36	228	362852	153.07	UG/ML	86
5)	Phenol-D5	(SURR)	9.19	367	470757	156.85	UG/ML	97
6)	Phenol		9.23	369	441076	142.52	UG/ML	84
7)	2-Chlorophenol		9.07	361	387289	134.05	UG/ML	92
8)	1,3-Dichlorobenzene		9.49	382	201440	~~66.98~~	~~UG/ML~~	89
9)	1,4-Dichlorobenzene		9.49	382	201440	66.15	UG/ML	98
10)	1,2-Dichlorobenzene		9.49	382	201440	~~62.69~~	~~UG/ML~~	97
12)	N-Nitrosodi-n-propylamine		11.06	459	156120	71.99	UG/ML	73
12)	N-Nitrosodi-n-propylamine		11.20	466	46082	~~21.25~~	~~UG/ML~~	39
18)	*d8-Naphthalene		13.18	563	316935	40.00	UG/ML	94
20)	Nitrobenzene-D5	(SURR)	11.20	466	266657	86.87	UG/ML	95
22)	Isophorone		11.98	504	17907	2.92	UG/ML	96
22)	Isophorone		12.24	517	7279	~~1.19~~	~~UG/ML~~	97
26)	1,2,4-Trichlorobenzene		13.12	560	215384	75.98	UG/ML	96
33)	p-Chloro-m-cresol		15.43	674	371883	156.55	UG/ML	97
35)	*d10-Acenaphthalene		18.53	826	200161	40.00	UG/ML	97
39)	2-Fluorobiphenyl	(SURR)	16.68	735	470887	75.03	UG/ML	97
44)	2,6-Dinitrotoluene		19.46	872	156836	83.67	UG/ML	76
46)	Acenaphthene		18.65	832	397362	66.07	UG/ML	99
49)	2,4-Dinitrotoluene		19.46	872	156836	83.67	UG/ML	83
51)	4-Nitrophenol		19.63	880	169122	357.03	UG/ML	100
54)	Fluorene		21.03	949	8990	~~1.54~~	~~UG/ML~~	84
56)	2,4,6-Tribromophenol	(SURR)	21.03	949	132933	206.42	UG/ML	92
58)	*d10-Phenanthrene		22.98	1045	282029	40.00	UG/ML	97
63)	Pentachlorophenol		22.80	1036	161236	195.66	UG/ML	98
66)	Di-n-butyl phthalate		25.38	1163	11377	~~1.22~~	~~UG/ML~~	99
67)	Fluoranthene		27.36	1260	544323	~~92.22~~	~~UG/ML~~	98
68)	Pyrene		27.36	1260	544323	93.66	UG/ML	96
69)	*d12-Chrysene		31.14	1446	180048	40.00	UG/ML	95
70)	Benzidine		28.13	1298	4853	~~4.03~~	~~UG/ML~~	100
71)	Terphenyl-D14	(SURR)	28.13	1298	408632	73.00	UG/ML	92
76)	bis(2-Ethylhexyl)phthalate		31.91	1484	31067	5.92	UG/ML	97
77)	*d12-Perylene		35.21	1646	127284	40.00	UG/ML	98

* Compound is ISTD

10-22-90

PESTICIDE/PCB DATA

QC SUMMARY

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK01	180 *	0
02	CA4720	194 *	0
03	CA4720MS	229 *	0
04	CA4720MSD	219 *	0
05	CA4721	194 *	0

ADVISORY QC LIMITS

S1 (DBC) = Dibutylchlorendate (20-150)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Matrix Spike - EPA Sample No.: CA4720 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	31.0	0	11.6	37 *	46-127
Heptachlor	31.0	0	71.9	232 *	35-130
Aldrin	31.0	0	88.7	286 *	34-132
Dieldrin	77.6	0	154	198 *	31-134
Endrin	77.6	0	186	240 *	42-139
4,4'-DDT	77.6	0	228	294 *	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	31.0	7.88	25 *	39	50	46-127
Heptachlor	31.0	61.1	197 *	16	31	35-130
Aldrin	31.0	73.3	236 *	19	43	34-132
Dieldrin	77.6	129	166 *	18	38	31-134
Endrin	77.6	156	201 *	18	45	42-139
4,4'-DDT	77.6	196	253 *	15	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 12 out of 12 outside limits

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Lab Sample ID: QC70282 Lab File ID: _____

Matrix:(soil/water) SOIL Level:(low/med) LOW

Date Extracted: 10/11/90 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed (1): 10/30/90 Date Analyzed (2): _____

Time Analyzed (1): 0726 Time Analyzed (2): _____

Instrument ID (1): D A Instrument ID (2): _____

GC Column ID (1): DB1701 GC Column ID (2): _____

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	CA4720	CA4720	10/30/90	
02	CA4720MS	CA4720MS	10/30/90	
03	CA4720MSD	CA4720MSD	10/30/90	
04	CA4721	CA4721	10/30/90	

COMMENTS:

SAMPLE DATA

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CA4720

Lab Name: ETC/EDISON Contract:

Lab Code: ETCEDIS Case No.: 70282 SAS No.: SDG No.: 00305

Matrix: (soil/water) SOIL Lab Sample ID: CA4720

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

Level: (low/med) LOW Date Received: 10/01/90

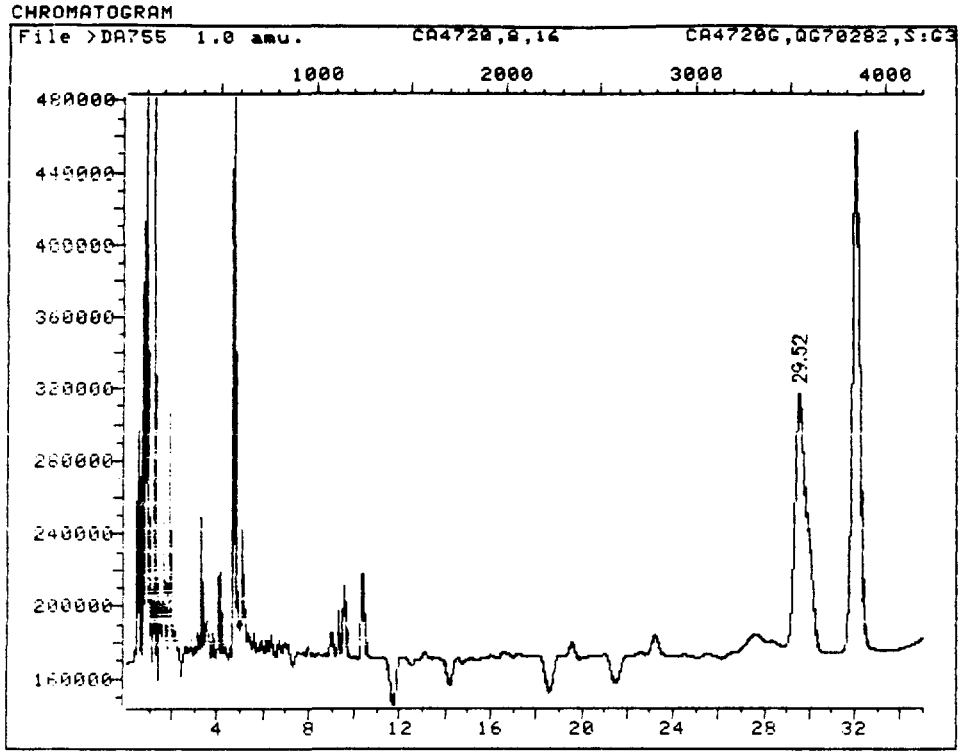
% Moisture: not dec. 14 dec. Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/30/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.3	U
319-85-7	beta-BHC	9.3	U
319-86-8	delta-BHC	9.3	U
58-89-9	Lindane	9.3	U
76-44-8	Heptachlor	9.3	U
309-00-2	Aldrin	9.3	U
1024-57-3	Heptachlor epoxide	9.3	U
959-98-8	Endosulfan I	9.3	U
60-57-1	Dieldrin	19	U
72-55-9	4,4'-DDE	19	U
72-20-8	Endrin	19	U
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	19	U
72-43-5	Methoxychlor	93	U
53494-70-5	Endrin ketone	19	U
5103-71-9	alpha-Chlordane	93	U
5103-74-2	beta-Chlordane	93	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	93	U
11104-28-2	Aroclor-1221	93	U
11141-16-5	Aroclor-1232	93	U
53469-21-9	Aroclor-1242	93	U
12672-29-6	Aroclor-1248	93	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U

CHROMATOGRAM



Data File: >DA755::U6 Quant Output File: ^DA755::AQ
Name: CA4720,8,16 Instrument ID: DA
Misc: CA4720G,QG70282,S:G3,1.26,20

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 13:54
Injected at: 901030 08:08

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901101 13:54
Output File: ^DA755::AQ Injected at: 901030 08:08
Data File: >DA755::U6 Dilution Factor: 1.00000
Name: CA4720,8,16 Instrument ID: DA
Misc: CA4720G,QG70282,S:G3,1.26,20

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19	#Dibutylchlorendate	29.52	3542	142528	.196	UG/ML	100

Compound uses ESTD

RBK
11/01/90
198

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CA4721

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Matrix: (soil/water) SOIL Lab Sample ID: CA4721

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 10/01/90

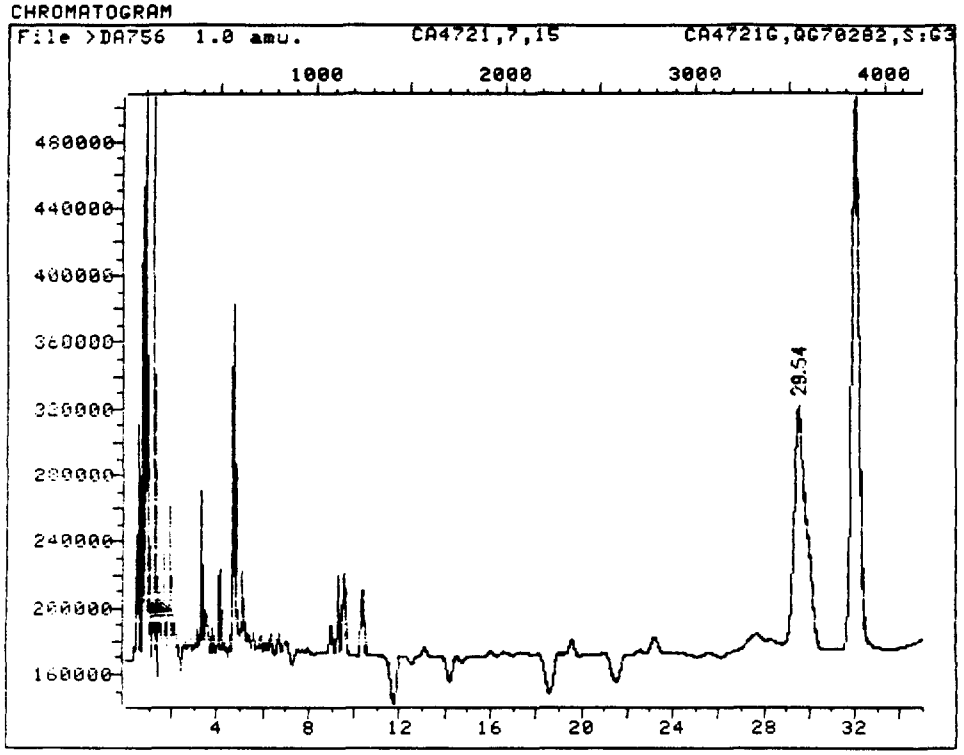
% Moisture: not dec. 14 dec. __ Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/30/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.3	U
319-85-7	beta-BHC	9.3	U
319-86-8	delta-BHC	9.3	U
58-89-9	Lindane	9.3	U
76-44-8	Heptachlor	9.3	U
309-00-2	Aldrin	9.3	U
1024-57-3	Heptachlor epoxide	9.3	U
959-98-8	Endosulfan I	9.3	U
60-57-1	Dieldrin	19	U
72-55-9	4,4'-DDE	19	U
72-20-8	Endrin	19	U
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	19	U
72-43-5	Methoxychlor	93	U
53494-70-5	Endrin ketone	19	U
5103-71-9	alpha-Chlordane	93	U
5103-74-2	beta-Chlordane	93	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	93	U
11104-28-2	Aroclor-1221	93	U
11141-16-5	Aroclor-1232	93	U
53469-21-9	Aroclor-1242	93	U
12672-29-6	Aroclor-1248	93	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U

CHROMATOGRAM



Data File: >DA756::U6 Quant Output File: ^DA756::AQ
Name: CA4721,7,15 Instrument ID: DA
Misc: CA4721G,QG70282,S:G3,1.26,20

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 13:57
Injected at: 901030 08:49

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901101 13:57
Output File: ^DA756::AQ Injected at: 901030 08:49
Data File: >DA756::U6 Dilution Factor: 1.00000
Name: CA4721,7,15 Instrument ID: DA
Misc: CA4721G,QG70282,S:G3,1.26,20

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19	#Dibutylchlorendate	29.54	3545	146368	.202	UG/ML	100

Compound uses ESTD

RBK
11/01/90

STANDARDS DATA

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Instrument ID: D A GC Column ID: DB1701

Dates of Analyses: 10/29/90 to 10/30/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
Aldrin	1930000	1810000	1810000	3.7	
Endrin	748000	626000	654000	9.5	
4,4'-DDT	378000	314000	344000	9.3	(1)
DBC	274000	235000	244000	8.1	

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown
(percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)
	INITIAL					
01	EVAL MIX B	10/29/90	1904	1.5	8.9	
02	EVAL MIX B	10/30/90	0645	1.0	7.7	
03	EVAL MIX B	10/30/90	1518	1.5	9.4	

(2) See Form instructions.

8E
PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Instrument ID: D A GC Column ID: DB1701

Dates of Analyses: 10/29/90 to 10/30/90

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	EVALA	10/29/90	1823	0.0	
02	EVALB	EVALB	10/29/90	1904	-0.1	
03	EVALC	EVALC	10/29/90	1945	0.0	
04	INDA	INDA	10/29/90	2026	0.0	
05	INDB	INDB	10/29/90	2108	0.0	
06	TOXAPH	TOXAPH	10/29/90	2149	0.0	
07	AR1016	AR1016	10/29/90	2230	0.0	
08	AR1221	AR1221	10/29/90	2311	0.0	
09	AR1232	AR1232	10/29/90	2353	0.0	
10	AR1242	AR1242	10/30/90	0034	0.0	
11	AR1248	AR1248	10/30/90	0115	0.0	
12	AR1254	AR1254	10/30/90	0156	0.0	
13	AR1260	AR1260	10/30/90	0237	0.0	
14	ZZZZZ	QC70307	10/30/90	0318	0.3	
15	ZZZZZ	CA5088	10/30/90	0400	-0.5	
16	ZZZZZ	CA5089	10/30/90	0441	-0.5	
17	ZZZZZ	CA5088MS	10/30/90	0522	0.0	
18	ZZZZZ	CA5088MSD	10/30/90	0604	0.1	
19	EVALB	EVALB	10/30/90	0645	0.0	
20	PBLK01	QC70282	10/30/90	0726	0.3	
21	CA4720	CA4720	10/30/90	0808	-0.5	
22	CA4721	CA4721	10/30/90	0849	-0.5	
23	CA4720MS	CA4720MS	10/30/90	0930	0.0	
24	CA4720MSD	CA4720MSD	10/30/90	1011	-0.1	
25	INDA	INDA	10/30/90	1053	0.0	
26	ZZZZZ	QC70308	10/30/90	1134	0.3	
27	ZZZZZ	CA5095	10/30/90	1215	-0.5	
28	ZZZZZ	CA4961	10/30/90	1257	-0.5	
29	ZZZZZ	CA4961MS	10/30/90	1339	0.0	
30	ZZZZZ	CA4961MSD	10/30/90	1436	0.0	
31	EVALB	EVALB	10/30/90	1518	0.0	
32	INDA	INDA	10/30/90	1805	0.0	
33	INDB	INDB	10/30/90	1846	0.0	

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Instrument ID: D A GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 10/29/90 TO: 10/30/90
TIME(S) OF ANALYSIS FROM: 2026 TO: 0237

DATE OF ANALYSIS 10/30/90
TIME OF ANALYSIS 1053
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5.30	5.27	5.33	4270000				
beta-BHC	8.99	8.96	9.02	1310000				
delta-BHC	9.97	9.94	10.00	1650000				
gamma-BHC	6.27	6.24	6.30	3370000	6.27	3140000	Y	6.8
Heptachlor	6.82	6.79	6.85	3090000	6.82	2920000	Y	5.5
Aldrin	7.68	7.65	7.71	2440000	7.68	2230000	Y	8.6
Hept. epoxide	10.54	10.51	10.57	1660000	10.55	1510000	Y	9.0
Endosulfan I	11.87	11.84	11.90	1600000	11.88	1460000	Y	8.8
Dieldrin	14.13	14.10	14.16	1090000	14.14	935000	Y	14.2
4,4'-DDE	13.51	13.15	13.87	863000				
Endrin	15.41	15.38	15.44	856000				
Endosulfan II	19.53	19.50	19.56	761000	19.55	774000	Y	-1.7
4,4'-DDD	19.81	19.78	19.84	484000				
Endo. sulfate	26.90	26.86	26.94	595000				
4,4'-DDT	21.19	21.16	21.22	471000	21.20	411000	Y	12.7
Methoxychlor	28.53	28.49	28.57	227000	28.53	193000	Y	15.0
Endrin ketone	30.79	30.68	30.90	477000				
a. Chlordane	12.67	12.64	12.70	1850000				
g. Chlordane	12.35	12.32	12.38	1390000				
Toxaphene	4.23	4.20	4.26	1360000				
Aroclor-1016	6.60	6.57	6.63	424000				
Aroclor-1221	4.66	4.63	4.69	365000				
Aroclor-1232	4.66	4.63	4.69	278000				
Aroclor-1242	6.59	6.56	6.62	365000				
Aroclor-1248	6.60	6.57	6.63	541000				
Aroclor-1254	13.83	13.80	13.86	253000				
Aroclor-1260	16.58	16.55	16.61	132000				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitiation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRDL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Instrument ID: D A GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 10/29/90 TO: 10/30/90
TIME(S) OF ANALYSIS FROM: 2026 TO: 0237

DATE OF ANALYSIS 10/30/90
TIME OF ANALYSIS 1805
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5.30	5.27	5.33	4270000				
beta-BHC	8.99	8.96	9.02	1310000				
delta-BHC	9.97	9.94	10.00	1650000				
gamma-BHC	6.27	6.24	6.30	3370000	6.27	3150000	Y	6.5
Heptachlor	6.82	6.79	6.85	3090000	6.82	2950000	Y	4.5
Aldrin	7.68	7.65	7.71	2440000	7.68	2260000	Y	7.4
Hept. epoxide	10.54	10.51	10.57	1660000	10.55	1530000	Y	7.8
Endosulfan I	11.87	11.84	11.90	1600000	11.88	1540000	Y	3.8
Dieldrin	14.13	14.10	14.16	1090000	14.14	956000	Y	12.3
4,4'-DDE	13.51	13.15	13.87	863000				
Endrin	15.41	15.38	15.44	856000				
Endosulfan II	19.53	19.50	19.56	761000	19.54	907000	Y	-19.2
4,4'-DDD	19.81	19.78	19.84	484000				
Endo. sulfate	26.90	26.86	26.94	595000				
4,4'-DDT	21.19	21.16	21.22	471000	21.19	427000	Y	9.3
Methoxychlor	28.53	28.49	28.57	227000	28.53	205000	Y	9.7
Endrin ketone	30.79	30.68	30.90	477000				
a. Chlordane	12.67	12.64	12.70	1850000				
g. Chlordane	12.35	12.32	12.38	1390000				
Toxaphene	4.23	4.20	4.26	1360000				
Aroclor-1016	6.60	6.57	6.63	424000				
Aroclor-1221	4.66	4.63	4.69	365000				
Aroclor-1232	4.66	4.63	4.69	278000				
Aroclor-1242	6.59	6.56	6.62	365000				
Aroclor-1248	6.60	6.57	6.63	541000				
Aroclor-1254	13.83	13.80	13.86	253000				
Aroclor-1260	16.58	16.55	16.61	132000				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitiation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRDL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Instrument ID: D_A GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 10/29/90 TO: 10/30/90
TIME(S) OF ANALYSIS FROM: 2026 TO: 0237
DATE OF ANALYSIS 10/30/90
TIME OF ANALYSIS 1846
EPA SAMPLE NO. (STANDARD) INDB

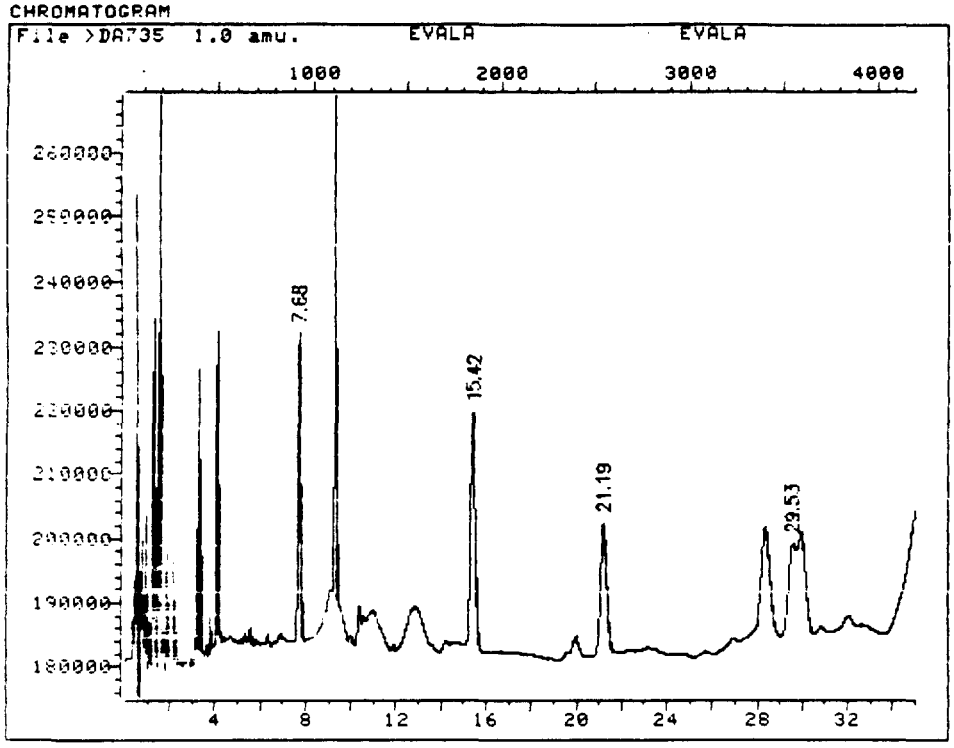
COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5.30	5.27	5.33	4270000	5.30	3470000	Y	18.7
beta-BHC	8.99	8.96	9.02	1310000	8.99	1010000	Y	22.9
delta-BHC	9.97	9.94	10.00	1650000	9.98	1260000	Y	23.6
gamma-BHC	6.27	6.24	6.30	3370000				
Heptachlor	6.82	6.79	6.85	3090000				
Aldrin	7.68	7.65	7.71	2440000	7.68	1890000	Y	22.5
Hept. epoxide	10.54	10.51	10.57	1660000				
Endosulfan I	11.87	11.84	11.90	1600000				
Dieldrin	14.13	14.10	14.16	1090000				
4,4'-DDE	13.51	13.15	13.87	863000	13.52	634000	Y	26.5
Endrin	15.41	15.38	15.44	856000	15.42	640000	Y	25.2
Endosulfan II	19.53	19.50	19.56	761000				
4,4'-DDD	19.81	19.78	19.84	484000	19.83	340000	Y	29.8
Endo. sulfate	26.90	26.86	26.94	595000	26.91	457000	Y	23.2
4,4'-DDT	21.19	21.16	21.22	471000				
Methoxychlor	28.53	28.49	28.57	227000				
Endrin ketone	30.79	30.68	30.90	477000	30.80	336000	Y	29.6
a. Chlordane	12.67	12.64	12.70	1850000	12.68	1560000	Y	15.7
g. Chlordane	12.35	12.32	12.38	1390000	12.36	1510000	Y	-8.6
Toxaphene	4.23	4.20	4.26	1360000				
Aroclor-1016	6.60	6.57	6.63	424000				
Aroclor-1221	4.66	4.63	4.69	365000				
Aroclor-1232	4.66	4.63	4.69	278000				
Aroclor-1242	6.59	6.56	6.62	365000				
Aroclor-1248	6.60	6.57	6.63	541000				
Aroclor-1254	13.83	13.80	13.86	253000				
Aroclor-1260	16.58	16.55	16.61	132000				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitiation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRDL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

CHROMATOGRAM



Data File: >DA735::U6
Name: EVALA
Misc: EVALA

Quant Output File: ^DA735::AQ
Instrument ID: DA

Id File: I307DH::U5
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:25
Injected at: 901029 18:23

QUANT REPORT

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:25
Output File: ^DA735::AQ Injected at: 901029 18:23
Data File: >DA735::U6 Dilution Factor: 1.00000
Name: EVALA Instrument ID: DA
Misc: EVALA

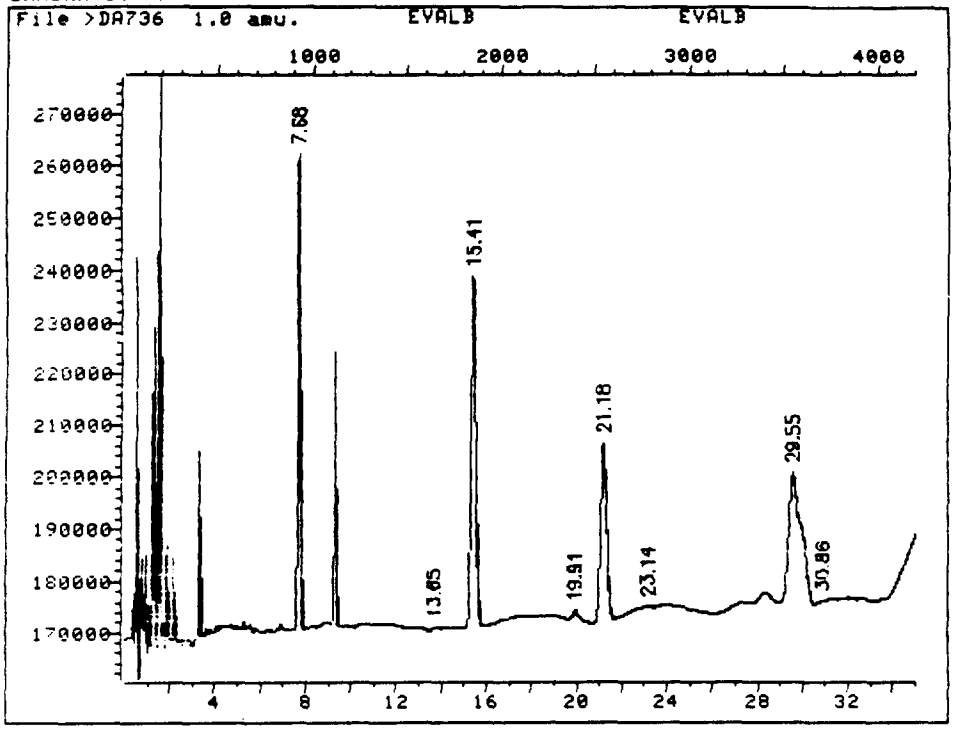
ID File: I307DA::US
Title: TSK/PST/PCB--DA--0B1?01--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
6)	#Aldrin	7.68	922	48256	.00989	UG/ML	100
13)	#Endrin	15.42	1850	37376	.0218	UG/ML	100
16)	#4,4'-DDT	21.19	2543	18909M	.0191	UG/ML	100
19)	#Dibutylchlorendate	29.53	3544	13711M	.0189	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA736::U6
Name: EVALB
Misc: EVALB

Quant Output File: ^DA736::RQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:29
Injected at: 901029 19:04

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:29
Output File: ^DA736::AQ Injected at: 901029 19:04
Data File: >DA736::U6 Dilution Factor: 1.00000
Name: EVALB Instrument ID: DA
Misc: EVALB

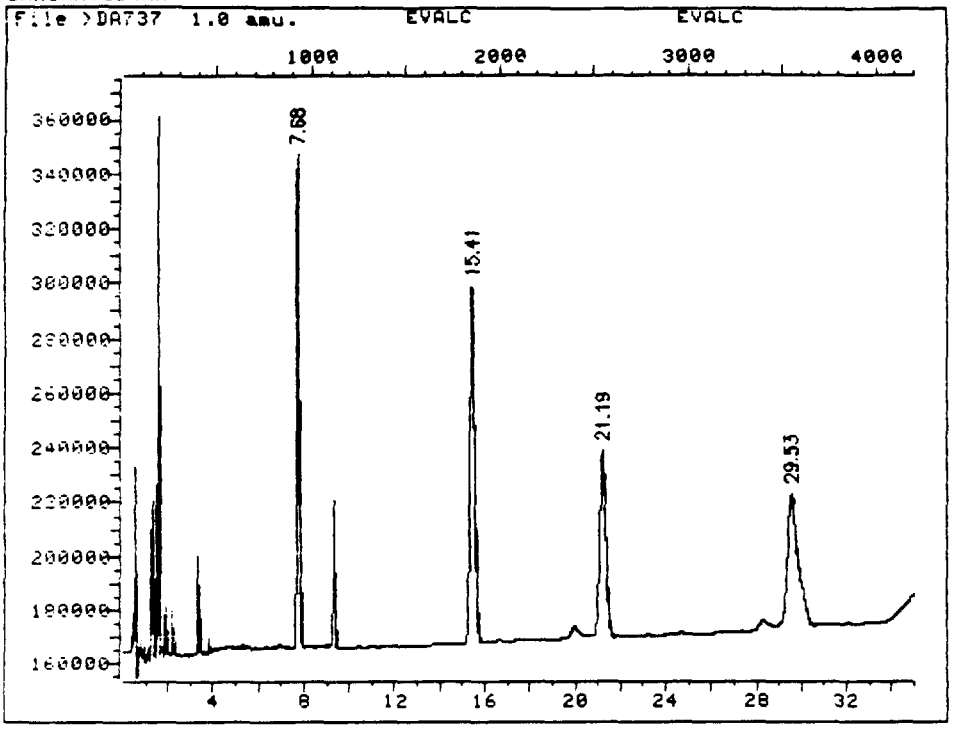
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
6)	#Aldrin	7.68	921	91712	.0188	UG/ML	100
11)	#4,4'-DDE	13.65	1638	960	.000556	UG/ML	100
13)	#Endrin	15.41	1849	67904	.0396	UG/ML	100
14)	#4,4'-DDD	19.91	2389	2432	.00251	UG/ML	100
16)	#4,4'-DDT	21.18	2542	34688	.0350	UG/ML	100
17)	#Endrin aldehyde	23.14	2777	320	.000364	UG/ML	100
19)	#Dibutylchlorendate	29.55	3546	25216	.0347	UG/ML	100
20)	#Endrin ketone	30.86	3703	704	.000738	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA737::U6
Name: EVALC
Misc: EVALC

Quant Output File: ^DA737::AQ
Instrument ID: DA

Id File: I307DA::U5
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:33
Injected at: 901029 19:45

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:33
Output File: ^DA737::AQ Injected at: 901029 19:45
Data File: >DA737::U6 Dilution Factor: 1.00000
Name: EVALC Instrument ID: DA
Misc: EVALC

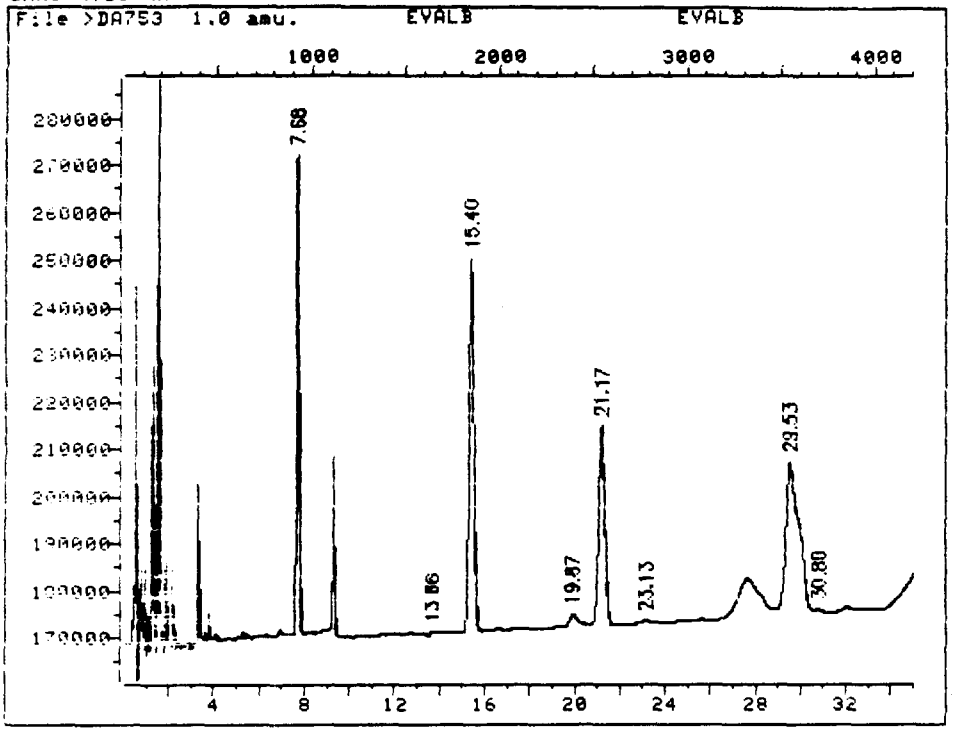
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
6)	#Aldrin	7.68	921	180801	.0371	UG/ML	100
13)	#Endrin	15.41	1849	130816	.0764	UG/ML	100
16)	#4,4'-DDT	21.19	2543	68736	.0693	UG/ML	100
19)	#Dibutylchlorendate	29.53	3543	48832	.0673	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA753::U6
Name: EVALB
Misc: EVALB

Quant Output File: ^DA753::AQ
Instrument ID: DA

Id File: I307DA::DA
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 12:3.
Injected at: 901030 06:45

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901101 12:31
Output File: ^DA753::AQ Injected at: 901030 06:45
Data File: >DA753::U6 Dilution Factor: 1.00000
Name: EVALB Instrument ID: DA
Misc: EVALB

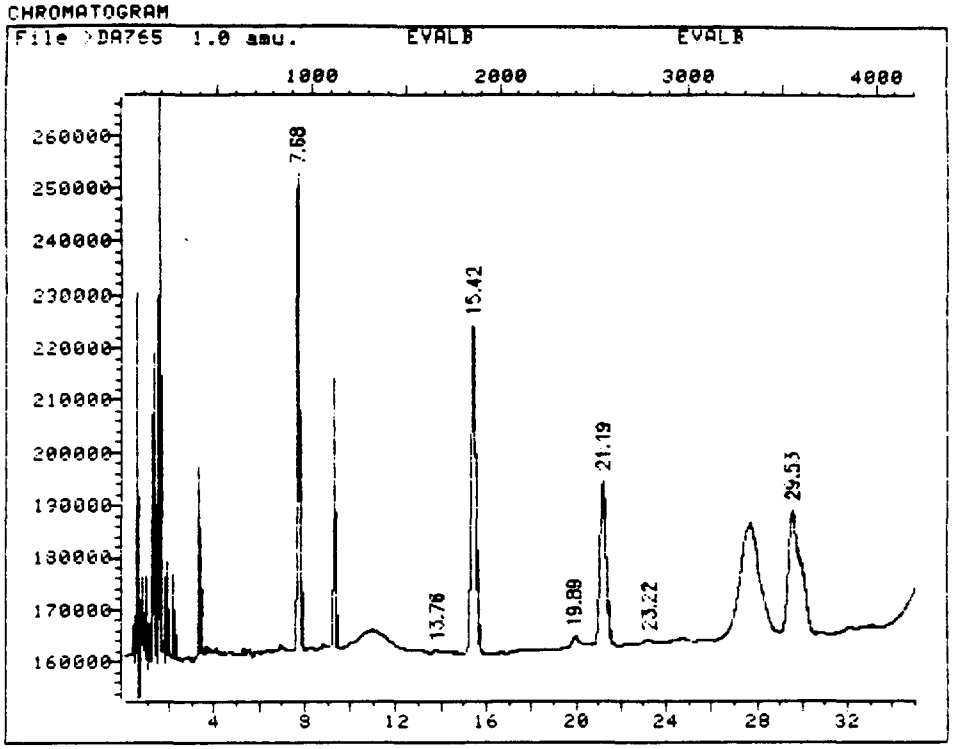
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
6)	#Aldrin	7.68	921	101376	.0208	UG/ML	100
11)	#4,4'-DDE	13.66	1639	1024	.000593	UG/ML	100
13)	#Endrin	15.40	1848	78912	.0461	UG/ML	100
14)	#4,4'-DDD	19.87	2384	2496	.00258	UG/ML	100
16)	#4,4'-DDT	21.17	2541	42048	.0424	UG/ML	100
17)	#Endrin aldehyde	23.13	2776	576	.000655	UG/ML	100
19)	#Dibutylchlorendate	29.53	3543	31424	.0433	UG/ML	100
20)	#Endrin ketone	30.80	3696	256	.0002e8	UG/ML	100

Compound uses ESTD

RCF
11/01/90

CHROMATOGRAM



Data File: :DA765::U6 Quant Output File: :DA765::AQ
Name: EVALB Instrument ID: DA
Misc: EVALB

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901031 09:46
Injected at: 901030 15:18

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901031 09:46
Output File: ^DA765::AQ Injected at: 901030 15:18
Data File: >DA765::U6 Dilution Factor: 1.00000
Name: EVALB Instrument ID: DA
Misc: EVALB

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

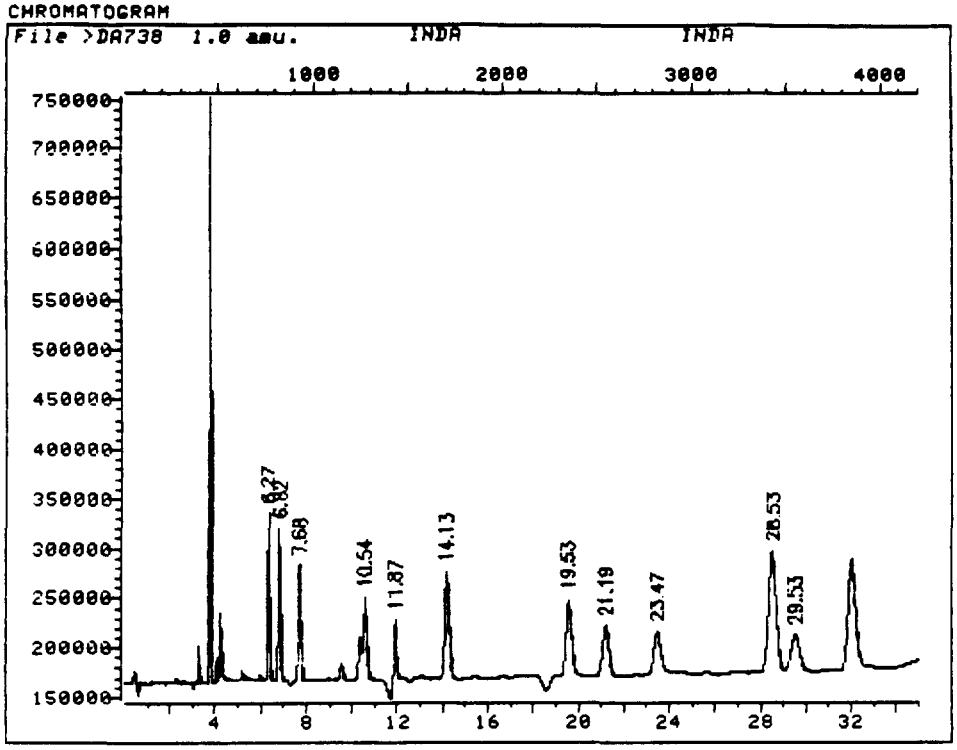
	Compound	R.T.	Scan#	Height	Conc	Units	q
6)	#Aldrin	7.68	921	90305	.0185	UG/ML	100
11)	#4,4'-DDE	13.76	1651	640	.000371	UG/ML	100
13)	#Endrin	15.42	1850	62593	.0365	UG/ML	100
14)	#4,4'-DDD	19.89	2387	2624	.00271	UG/ML	100
16)	#4,4'-DDT	21.19	2543	31425	.0317	UG/ML	100
17)	#Endrin aldehyde	23.22	2787	960	.00109	UG/ML	100
19)	#Dibutylchlorendate	29.53	3544	23488	.0324	UG/ML	100

Compound uses ESTD

RBLT

11/01/90

CHROMATOGRAM



Data File: >DA738::U6 Quant Output File: ^DA738::AQ
Name: INDA Instrument ID: DA
Misc: INDA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901104 10:39

Operator ID: RK2225
Quant Time: 901104 10:40
Injected at: 901029 20:26

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901104 10:40
Output File: ^DA738::AQ Injected at: 901029 20:26
Data File: >DA738::U6 Dilution Factor: 1.00000
Name: INDA Instrument ID: DA
Misc: INDA

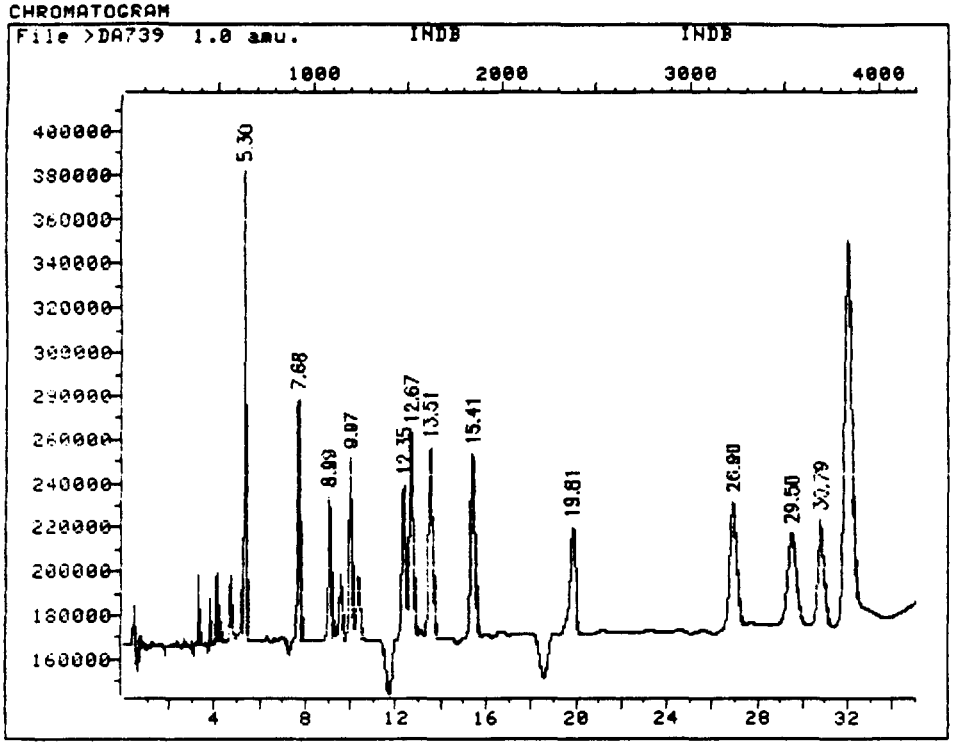
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901104 10:39

	Compound	R.T.	Scan#	Height	Conc	Units	q
2)	#Gamma-BHC	6.27	753	168705	.0250	UG/ML	100
4)	#Heptachlor	6.82	818	154304	.0250	UG/ML	100
6)	#Aldrin	7.68	921	121985	.0250	UG/ML	100
7)	#Heptachlor epoxide	10.54	1265	82808	.0250	UG/ML	100
10)	#Endosulfan I	11.87	1424	80065	.0250	UG/ML	100
12)	#Dieldrin	14.13	1696	108608	.0500	UG/ML	100
15)	#Endosulfan II	19.53	2344	76096	.0500	UG/ML	100
16)	#4,4'-DDT	21.19	2543	47128	.0498	UG/ML	100
17)	#Endrin aldehyde	23.47	2817	43968	.0500	UG/ML	100
19)	#Dibutylchlorendate	29.53	3543	36288	.0500	UG/ML	100
21)	#Methoxychlor	28.53	3423	113556	.252	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA739::U6
Name: INDB
Misc: INDB

Quant Output File: ^DA739::AQ
Instrument ID: DA

Id File: 1307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:41
Injected at: 901029 21:08

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:41
Output File: ^DA739::AQ Injected at: 901029 21:08
Data File: >DA739::U6 Dilution Factor: 1.00000
Name: INDB Instrument ID: DA
Misc: INDB

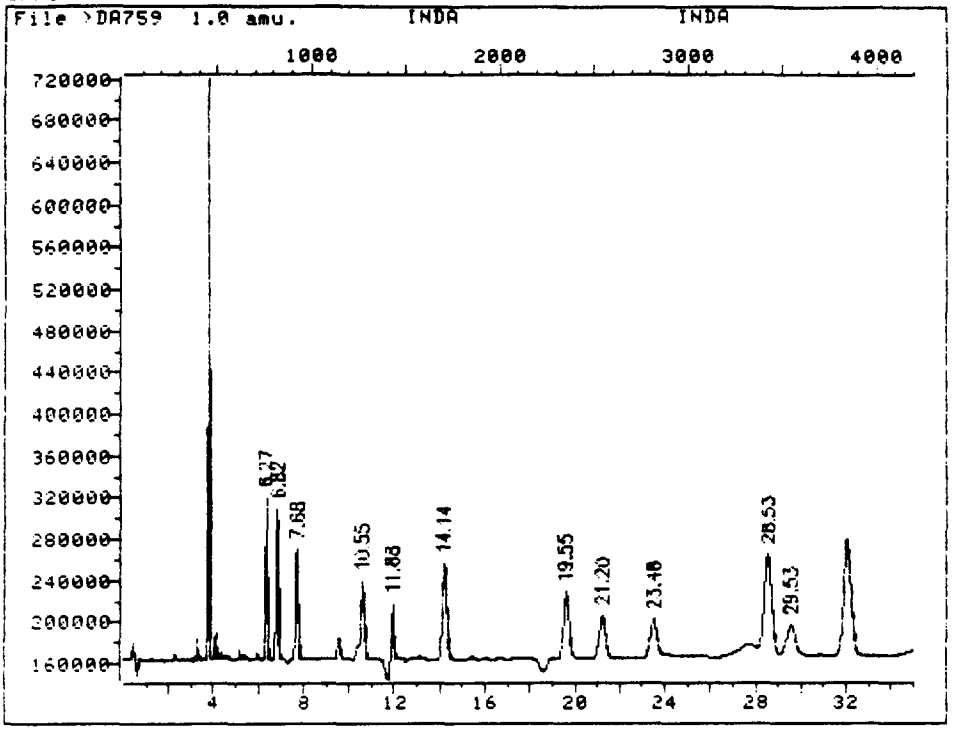
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
1)	#Alpha-BHC	5.30	636	213484	.0250	UG/ML	100
3)	#Beta-BHC	8.99	1079	65348	.0250	UG/ML	100
5)	#Delta-BHC	9.97	1196	82560	.0250	UG/ML	100
6)	#Aldrin	7.68	921	117121	.0240	UG/ML	100
8)	#gamma-Chlordane	12.35	1482	69632	.250	UG/ML	100
9)	#alpha-Chlordane	12.67	1521	92673	.250	UG/ML	100
11)	#4,4'-DDE	13.51	1621	86336	.0500	UG/ML	100
13)	#Endrin	15.41	1849	85632	.0500	UG/ML	100
14)	#4,4'-DDD	19.81	2377	48448	.0500	UG/ML	100
18)	#Endosulfan sulfate	26.90	3228	59520	.0500	UG/ML	100
19)	#Dibutylchlorendate	29.50	3540	41472	.0571	UG/ML	100
20)	#Endrin ketone	30.79	3695	47680	.0500	UG/ML	100

Compound uses ESTD

RBT
11/01/90

CHROMATOGRAM



Data File: >DA759::U6 Quant Output File: >DA759::AQ
Name: INDA Instrument ID: DA
Misc: INDA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901031 09:43
Injected at: 901030 10:53

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901031 09:43
Output File: ^DA759::AQ Injected at: 901030 10:53
Data File: >DA759::U6 Dilution Factor: 1.00000
Name: INDA Instrument ID: DA
Misc: INDA

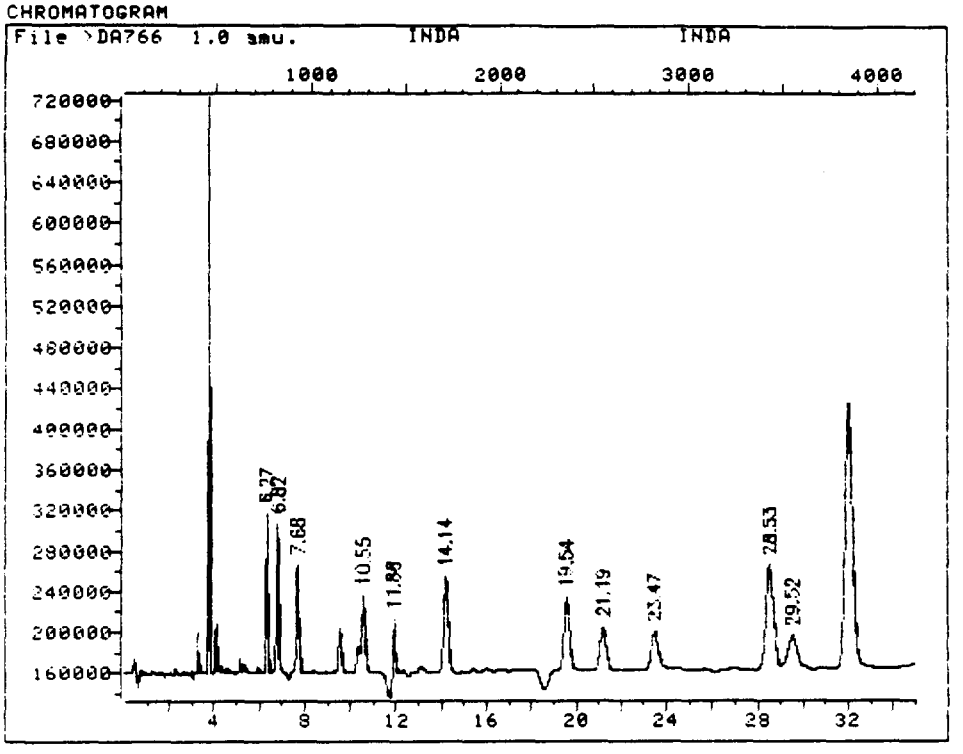
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
2)	#Gamma-BHC	6.27	753	157057	.0233	UG/ML	100
4)	#Heptachlor	6.82	819	146113	.0237	UG/ML	100
6)	#Aldrin	7.68	922	111425	.0228	UG/ML	100
7)	#Heptachlor epoxide	10.55	1266	75618	.0228	UG/ML	100
10)	#Endosulfan I	11.88	1425	73025	.0228	UG/ML	100
12)	#Dieldrin	14.14	1697	93505	.0430	UG/ML	100
15)	#Endosulfan II	19.55	2346	77441	.0509	UG/ML	100
16)	#4,4'-DDT	21.20	2544	41088	.0414	UG/ML	100
17)	#Endrin aldehyde	23.48	2818	36480	.0415	UG/ML	100
19)	#Dibutylchlorendate	29.53	3543	30144	.0415	UG/ML	100
21)	#Methoxychlor	28.53	3424	96704	.199	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA766::U6
Name: INDA
Misc: INDA

Quant Output File: >DA700::HQ
Instrument ID: DA

Io File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901031 09:49
Injected at: 901030 18:05

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901031 09:49
Output File: ^DA766::AQ Injected at: 901030 18:05
Data File: >DA766::U6 Dilution Factor: 1.00000
Name: INDA Instrument ID: DA
Misc: INDA

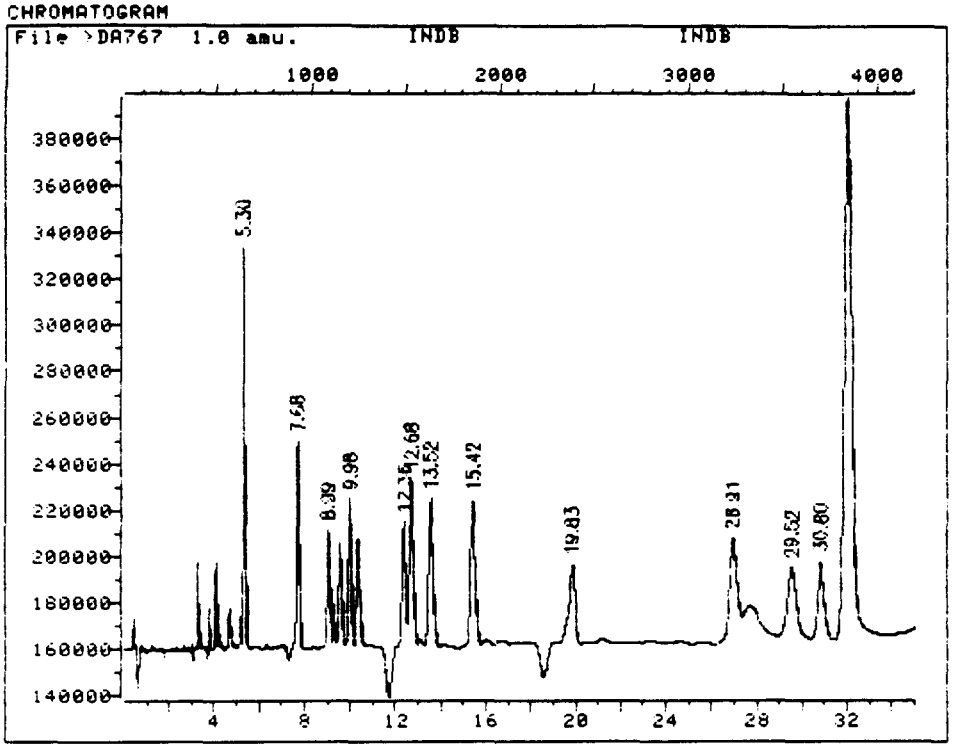
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
2)	#Gamma-BHC	6.27	753	157505	.0233	UG/ML	100
4)	#Heptachlor	6.82	819	147713	.0239	UG/ML	100
6)	#Aldrin	7.68	922	112961	.0232	UG/ML	100
7)	#Heptachlor epoxide	10.55	1266	76255	.0230	UG/ML	100
10)	#Endosulfan I	11.88	1425	76865	.0240	UG/ML	100
12)	#Dieldrin	14.14	1697	95617	.0440	UG/ML	100
15)	#Endosulfan II	19.54	2345	90689	.0596	UG/ML	100
16)	#4,4'-DDT	21.19	2543	42689	.0430	UG/ML	100
17)	#Endrin aldehyde	23.47	2817	38145	.0434	UG/ML	100
19)	#Dibutylchlorendate	29.52	3542	32705	.0451	UG/ML	100
21)	#Methoxychlor	28.53	3423	102337	.210	UG/ML	100

Compound uses ESTD

RK
11/01/90

CHROMATOGRAM



Data File: >DA767::U6
Name: INDB
Misc: INDB

Quant Output File: ^DA767::AQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901031 10:09
Injected at: 901030 18:46

QUANT REPORT

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901031 10:09
Output File: ^DA767::AQ Injected at: 901030 18:46
Data File: >DA767::U6 Dilution Factor: 1.00000
Name: INDB Instrument ID: DA
Misc: INDB

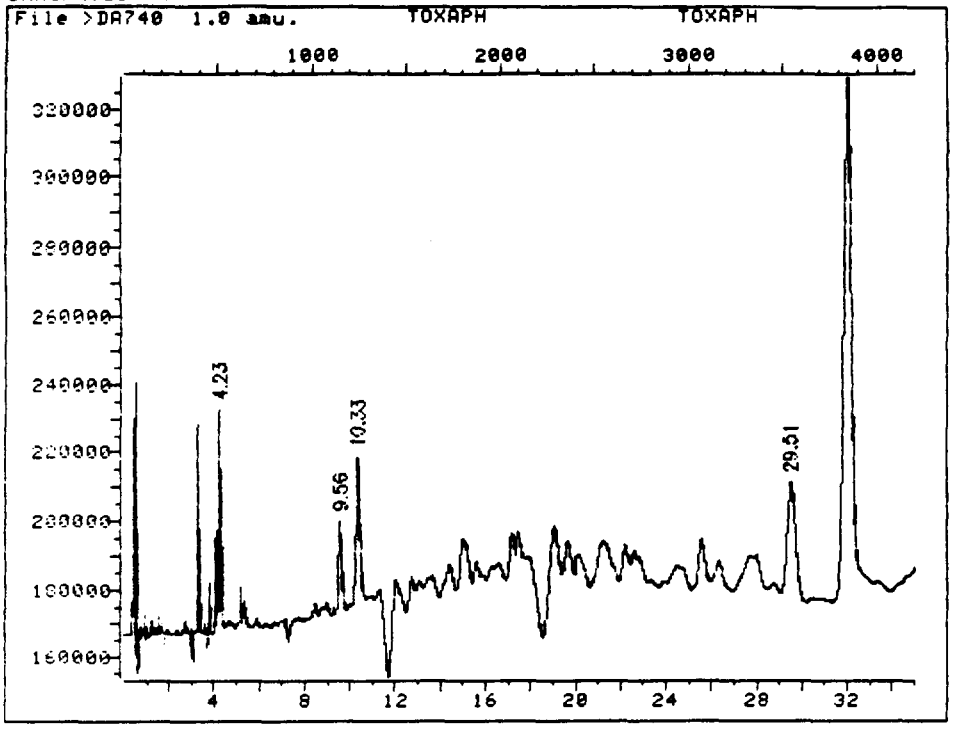
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
1)	#Alpha-BHC	5.30	636	173652	.0203	UG/ML	100
3)	#Beta-BHC	8.99	1079	50689	.0194	UG/ML	100
5)	#Delta-BHC	9.98	1197	63105	.0191	UG/ML	100
6)	#Aldrin	7.68	921	94657	.0194	UG/ML	100
8)	#gamma-Chlordane	12.36	1483	75329	.270	UG/ML	100
9)	#alpha-Chlordane	12.68	1522	77832	.210	UG/ML	100
11)	#4,4'-DDE	13.52	1622	63425	.0367	UG/ML	100
13)	#Endrin	15.42	1850	64001	.0374	UG/ML	100
14)	#4,4'-DDD	19.83	2379	34049	.0351	UG/ML	100
18)	#Endosulfan sulfate	26.91	3229	45697	.0384	UG/ML	100
19)	#Dibutylchlorendate	29.52	3542	30465	.0420	UG/ML	100
20)	#Endrin ketone	30.80	3696	33601	.0352	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA740::U6
Name: TOXAPH
Misc: TOXAPH

Quant Output File: ^DA740::HQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:46
Injected at: 901029 21:49

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:46
Output File: ^DA740::AQ Injected at: 901029 21:49
Data File: >DA740::U6 Dilution Factor: 1.00000
Name: TOXAPH Instrument ID: DA
Misc: TOXAPH

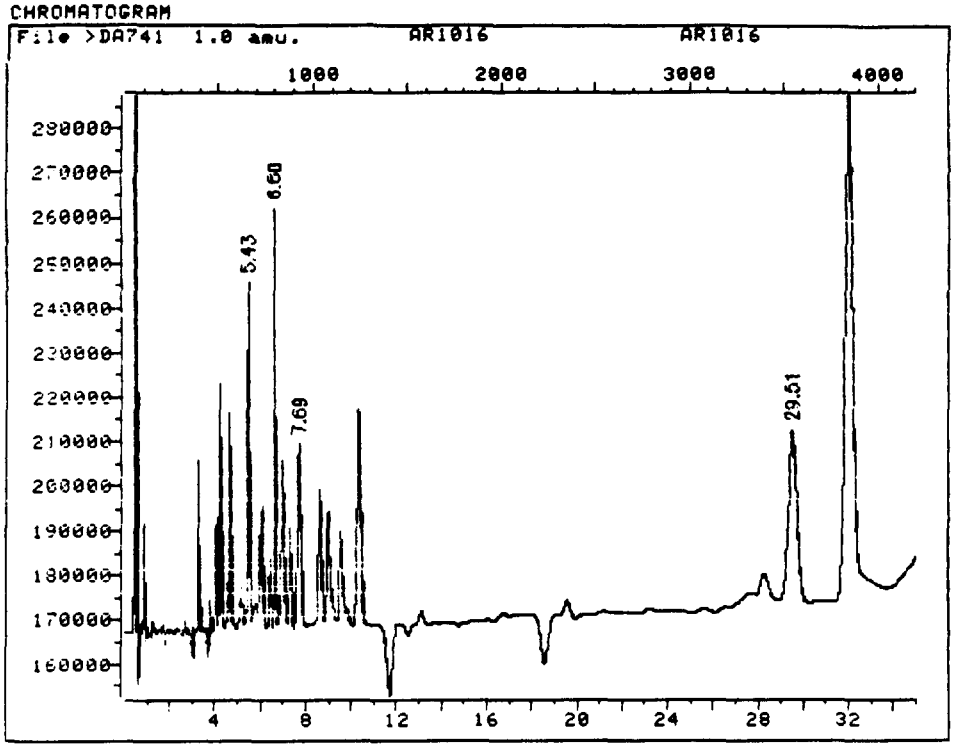
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	34688	.0478	UG/ML	100
22)	#Toxaphene	4.23	508	63983	.997	UG/ML	100
23)	#Toxaphene-2	10.33	1240	43968	1.00	UG/ML	100
24)	#Toxaphene-3	9.56	1147	27584	1.00	UG/ML	100

Compound uses ESTD

RAK
11/01/90

CHROMATOGRAM



Data File: >DA741::U6
Name: AR1016
Misc: AR1016

Quant Output File: ^DA741::HD
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:50
Injected at: 901029 22:3[illegible]

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:50
Output File: ^DA741::AQ Injected at: 901029 22:30
Data File: >DA741::U6 Dilution Factor: 1.00000
Name: AR1016 Instrument ID: DA
Misc: AR1016

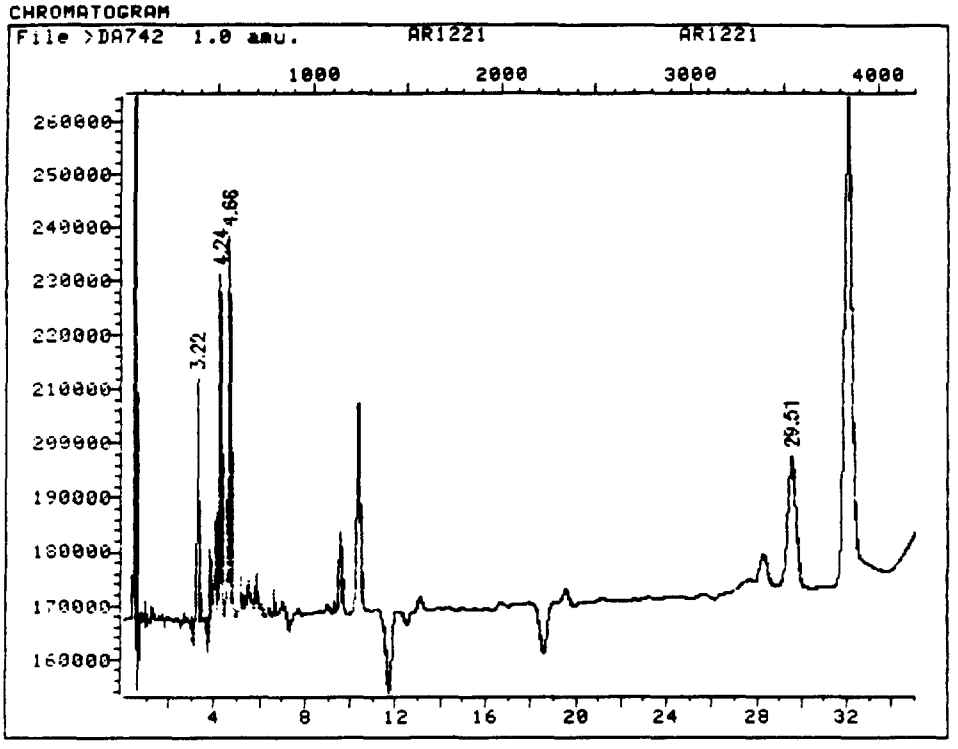
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	38400	.0529	UG/ML	100
25)	#Aroclor 1016	6.60	792	93632	.250	UG/ML	100
26)	#AR 1016-2	5.43	652	77214	.250	UG/ML	100
27)	#AR 1016-3	7.69	923	41280	.250	UG/ML	100

Compound uses ESTD

RBK
10/01/90

CHROMATOGRAM



Data File: >DA742::U6
Name: AR1221
Misc: AR1221

Quant Output File: ^DA742::AQ
Instrument ID: DA

Id File: I307DA::U5
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:53
Injected at: 901029 23:11

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:53
Output File: ^DA742::AQ Injected at: 901029 23:11
Data File: >DA742::U6 Dilution Factor: 1.00000
Name: AR1221 Instrument ID: DA
Misc: AR1221

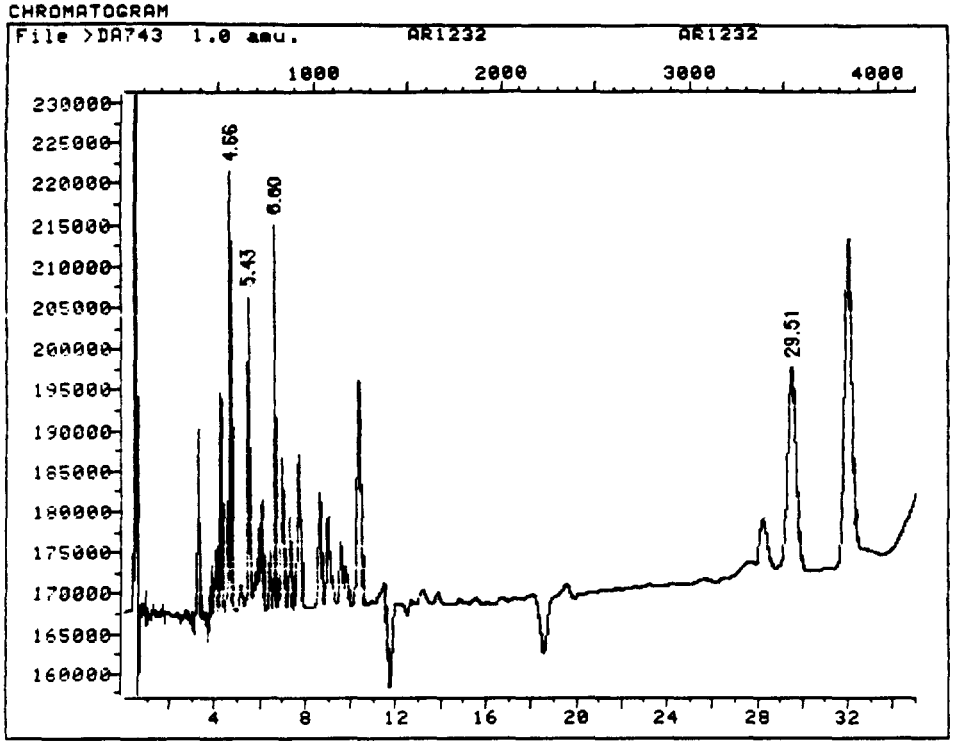
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	24064	.0332	UG/ML	100
28)	#Aroclor 1221	4.66	559	70236	.250	UG/ML	100
29)	#AR 1221-2	4.24	509	65067	.250	UG/ML	100
30)	#AR 1221-3	3.22	386	47181	.250	UG/ML	100

Compound uses ESTD

RCK
11/21/90

CHROMATOGRAM



Data File: >DA743::U6
Name: AR1232
Misc: AR1232

Quant Output File: ^DA743::AQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 16:57
Injected at: 901029 23:53

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 16:57
Output File: ^DA743::AQ Injected at: 901029 23:53
Data File: >DA743::U6 Dilution Factor: 1.00000
Name: AR1232 Instrument ID: DA
Misc: AR1232

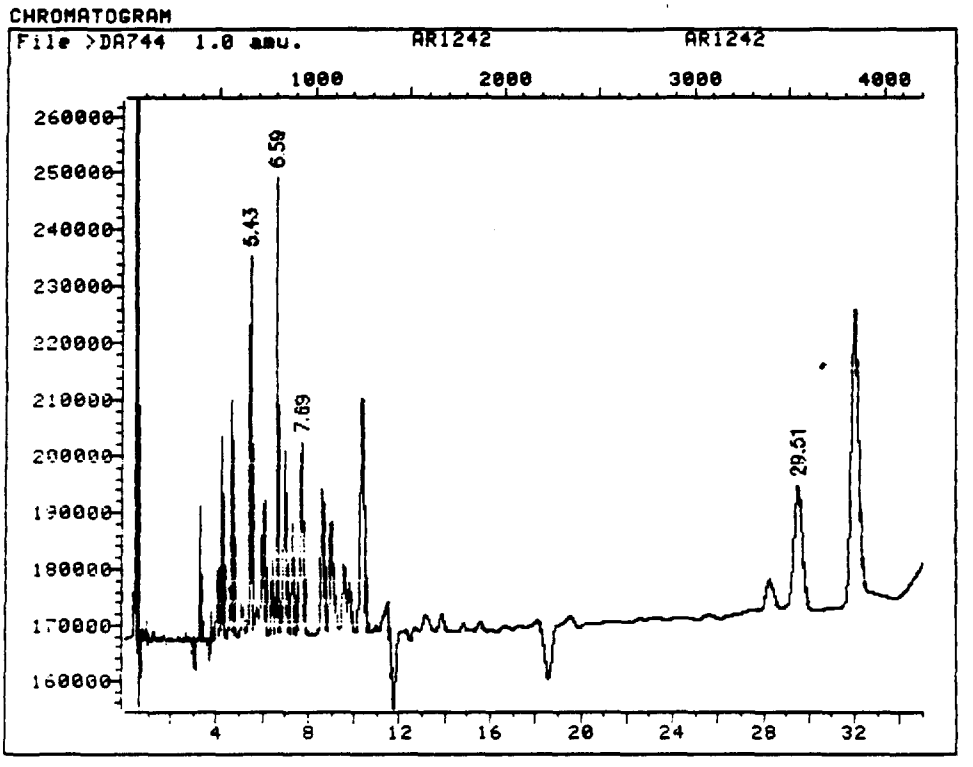
ID File: I307DA::US
Title: TSK/PST/PCB--DA--081701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	24832	.0342	UG/ML	100
31)	#Aroclor 1232	4.66	559	53906	.250	UG/ML	100
32)	#AR 1232-2	6.60	792	46912	.250	UG/ML	100
33)	#AR 1232-3	5.43	652	38278	.250	UG/ML	100

Compound uses ESTD

NBK
11/01/90

CHROMATOGRAM



Data File: >DA744::U6
Name: AR1242
Misc: AR1242

Quant Output File: ^DA744::AQ
Instrument ID: DA

Id File: I307DA::U5
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901102 10:02
Injected at: 901030 00:34

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901102 10:02
Output File: ^DA744::AQ Injected at: 901030 00:34
Data File: >DA744::U6 Dilution Factor: 1.00000
Name: AR1242 Instrument ID: DA
Misc: AR1242

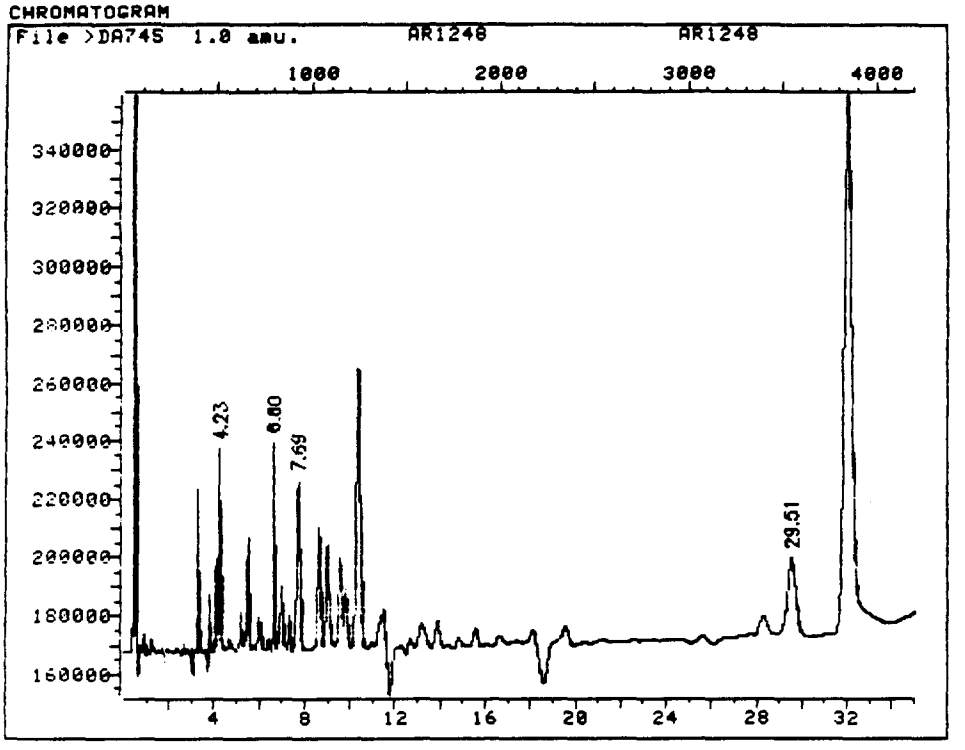
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	21760	.0300	UG/ML	100
34)	#Aroclor 1242	6.59	791	80896	.250	UG/ML	100
35)	#AR 1242-2	5.43	652	67136	7.28	UG/ML	100
36)	#AR 1242-3	7.69	923	34304	.250	UG/ML	100

Compound uses ESTD

RSK 16/02/90

CHROMATOGRAM



Data File: >DA745::U6
Name: AR1248
Misc: AR1248

Quant Output File: ^DA745::AQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 17:04
Injected at: 901030 01:15

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 17:04
Output File: ^DA745::AQ Injected at: 901030 01:15
Data File: >DA745::U6 Dilution Factor: 1.00000
Name: AR1248 Instrument ID: DA
Misc: AR1248

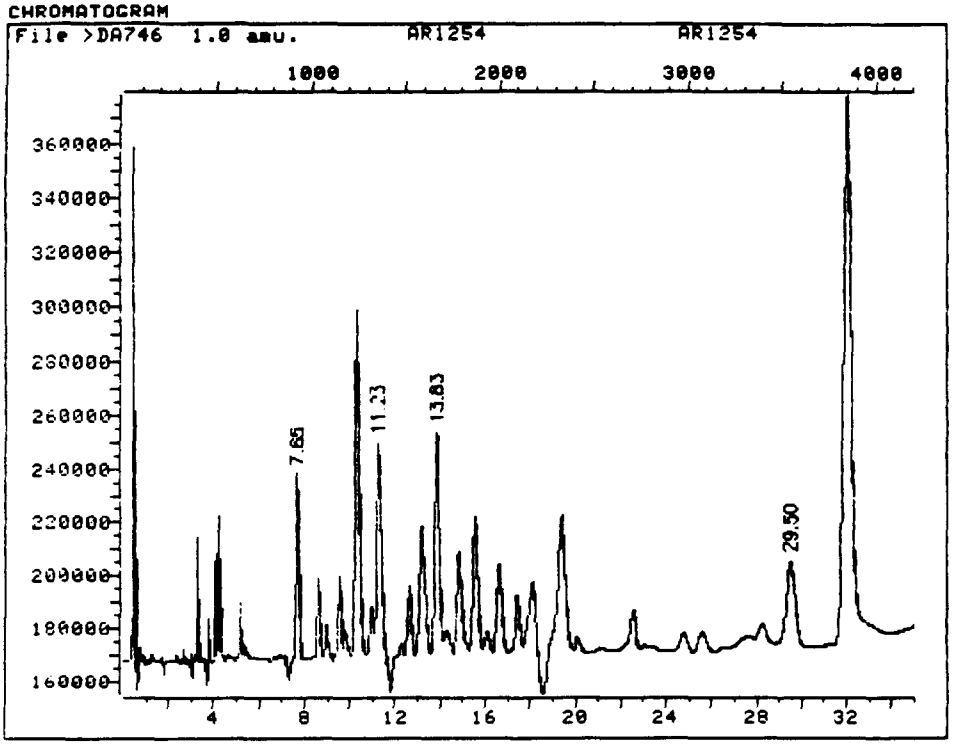
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.51	3541	26560	.0366	UG/ML	100
37)	#Aroclor 1248	6.60	792	71616	.250	UG/ML	100
38)	#AR 1248-2	4.23	508	69022	.250	UG/ML	100
39)	#AR 1248-3	7.69	923	58432	.250	UG/ML	100

Compound uses ESTD

RBF
11/01/90

CHROMATOGRAM



Data File: >DA746::U6
Name: AR1254
Misc: AR1254

Quant Output File: ^DA746::HQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 17:08
Injected at: 901030 01:56

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 17:08
Output File: ^DA746::AQ Injected at: 901030 01:56
Data File: >DA746::U6 Dilution Factor: 1.00000
Name: AR1254 Instrument ID: DA
Misc: AR1254

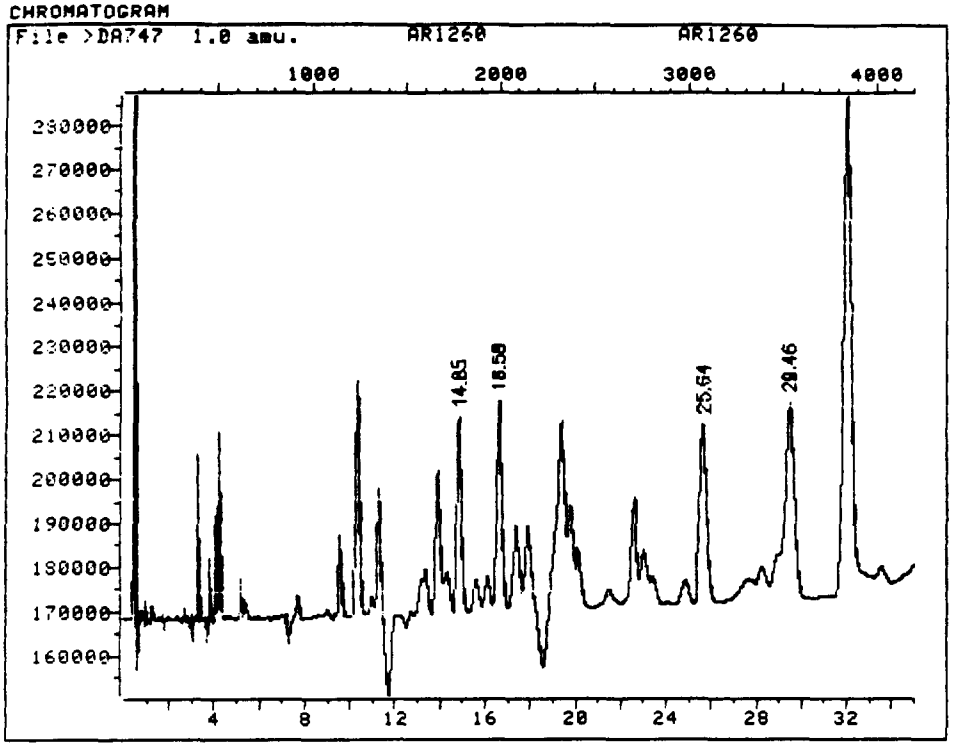
ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.50	3540	31616	.0436	UG/ML	100
40)	#Aroclor 1254	13.83	1659	83348	.500	UG/ML	100
41)	#AR 1254-2	11.23	1348	93057	.500	UG/ML	100
42)	#AR 1254-3	7.65	918	77057	.500	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHROMATOGRAM



Data File: >DA747::U6
Name: AR1260
Misc: AR1260

Quant Output File: ^DA747::AQ
Instrument ID: DA

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901030 17:12
Injected at: 901030 02:37

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901030 17:12
Output File: ^DA747::AQ Injected at: 901030 02:37
Data File: >DA747::U6 Dilution Factor: 1.00000
Name: AR1260 Instrument ID: DA
Misc: AR1260

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2u
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.46	3535	44224	.0609	UG/ML	100
43)	#Aroclor 1260	16.58	1990	46848	.500	UG/ML	100
44)	#AR 1260-2	14.85	1782	44352	.500	UG/ML	100
45)	#AR 1260-3	25.64	3077	40896	.500	UG/ML	100

Compound uses ESTD

RBK
11/01/90

RAW QC DATA

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK01

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Matrix: (soil/water) SOIL Lab Sample ID: QC70282

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: _____

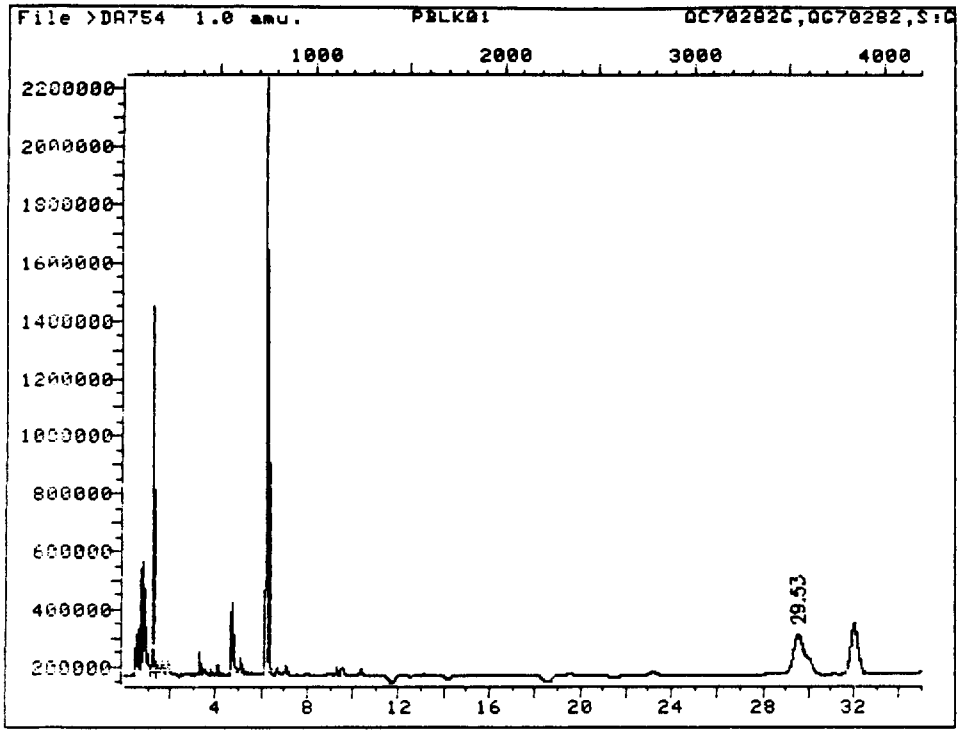
% Moisture: not dec. __ dec. __ Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/30/90

GPC Cleanup: (Y/N) N pH: 0.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	16	U
319-85-7	beta-BHC	16	U
319-86-8	delta-BHC	16	U
58-89-9	Lindane	16	U
76-44-8	Heptachlor	16	U
309-00-2	Aldrin	16	U
1024-57-3	Heptachlor epoxide	16	U
959-98-8	Endosulfan I	16	U
60-57-1	Dieldrin	32	U
72-55-9	4,4'-DDE	32	U
72-20-8	Endrin	32	U
33213-65-9	Endosulfan II	32	U
72-54-8	4,4'-DDD	32	U
1031-07-8	Endosulfan sulfate	32	U
50-29-3	4,4'-DDT	32	U
72-43-5	Methoxychlor	160	U
53494-70-5	Endrin ketone	32	U
5103-71-9	alpha-Chlordane	160	U
5103-74-2	beta-Chlordane	160	U
8001-35-2	Toxaphene	320	U
12674-11-2	Aroclor-1016	160	U
11104-28-2	Aroclor-1221	160	U
11141-16-5	Aroclor-1232	160	U
53469-21-9	Aroclor-1242	160	U
12672-29-6	Aroclor-1248	160	U
11097-69-1	Aroclor-1254	320	U
11096-82-5	Aroclor-1260	320	U

CHROMATOGRAM



Data File: >DA754::U6 Quant Output File: ^DA754::AQ
Name: PBLK01 Instrument ID: DA
Misc: QC70282G,QG70282,S:G3,30.00,20

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 13:50
Injected at: 901030 07:26

perator ID: RK2225 Quant Rev: 7 Quant Time: 901101 13:50
Output File: ^DA754::AQ Injected at: 901030 07:26
Data File: >DA754::U6 Dilution Factor: 1.00000
Name: PBLK01 Instrument ID: DA
Misc: QC70282G,QG70282,S:G3,30.00,20

'D File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
19)	#Dibutylchlorendate	29.53	3543	137536	.190	UG/ML	100

Compound uses ESTD

RBT
11/01/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CA4720MS

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Matrix: (soil/water) SOIL Lab Sample ID: CA4720MS

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 10/01/90

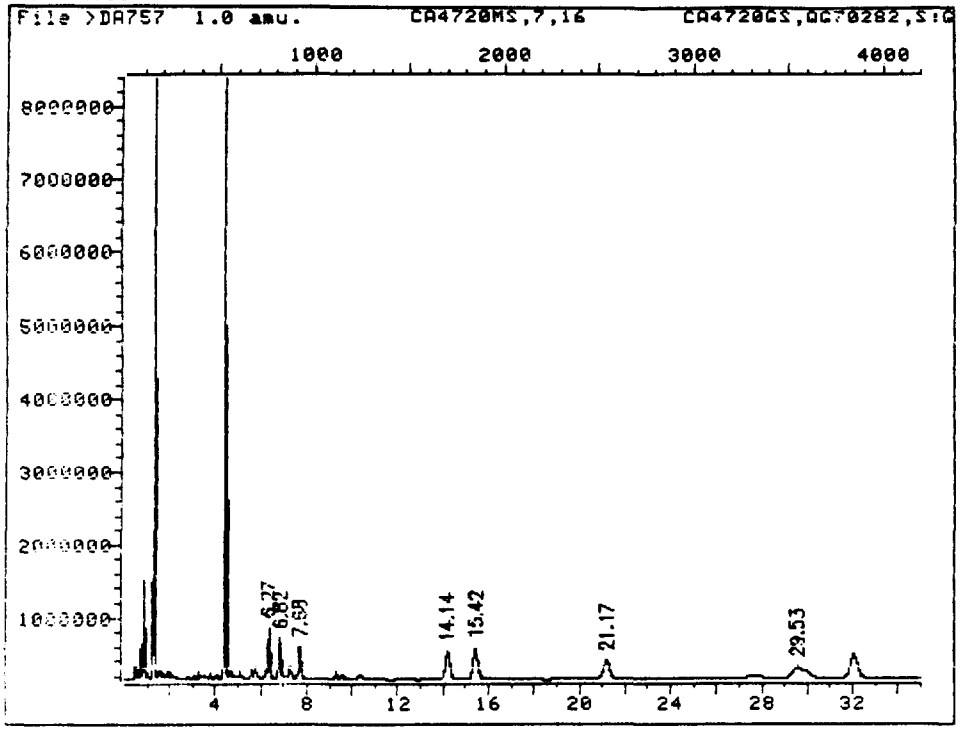
% Moisture: not dec. 14 dec. __ Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/30/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.3	U
319-85-7	beta-BHC	9.3	U
319-86-8	delta-BHC	9.3	U
58-89-9	Lindane	11	
76-44-8	Heptachlor	68	
309-00-2	Aldrin	69	
1024-57-3	Heptachlor epoxide	9.3	U
959-98-8	Endosulfan I	9.3	U
60-57-1	Dieldrin	130	
72-55-9	4,4'-DDE	19	U
72-20-8	Endrin	190	
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	190	
72-43-5	Methoxychlor	93	U
53494-70-5	Endrin ketone	19	U
5103-71-9	alpha-Chlordane	93	U
5103-74-2	beta-Chlordane	93	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	93	U
11104-28-2	Aroclor-1221	93	U
11141-16-5	Aroclor-1232	93	U
53469-21-9	Aroclor-1242	93	U
12672-29-6	Aroclor-1248	93	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U

CHROMATOGRAM



Data File: >DA757::U6 Quant Output File: ^DA757::AQ
Name: CA4720MS,7,16 Instrument ID: DA
Misc: CA4720GS,QG70282,S:G3,1.26,20

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 14:00
Injected at: 901030 09:30

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901101 14:00
Output File: ^DA757::AQ Injected at: 901030 09:30
Data File: >DA757::U6 Dilution Factor: 1.00000
Name: CA4720MS,7,16 Instrument ID: DA
Misc: CA4720GS,QG70282,S:G3,1.26,20

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
2)	#Gamma-BHC	6.27	753	694148	.103	UG/ML	100
4)	#Heptachlor	6.82	819	541123	.0877	UG/ML	100
6)	#Aldrin	7.68	921	432322	.0886	UG/ML	100
12)	#Dieldrin	14.14	1697	371202	.171	UG/ML	100
13)	#Endrin	15.42	1850	411394	.240	UG/ML	100
16)	#4,4'-DDT	21.17	2541	241218	.243	UG/ML	100
19)	#Dibutylchlorendate	29.53	3544	139456	.192	UG/ML	100

Compound uses ESTD

RBK
1/01/90

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

CA4720MSD

Lab Name: ETC/EDISON Contract: _____

Lab Code: ETCEDIS Case No.: 70282 SAS No.: _____ SDG No.: 00305

Matrix: (soil/water) SOIL Lab Sample ID: CA4720MSD

Sample wt/vol: 30.0 (g/mL) G Lab File ID: _____

Level: (low/med) LOW Date Received: 10/01/90

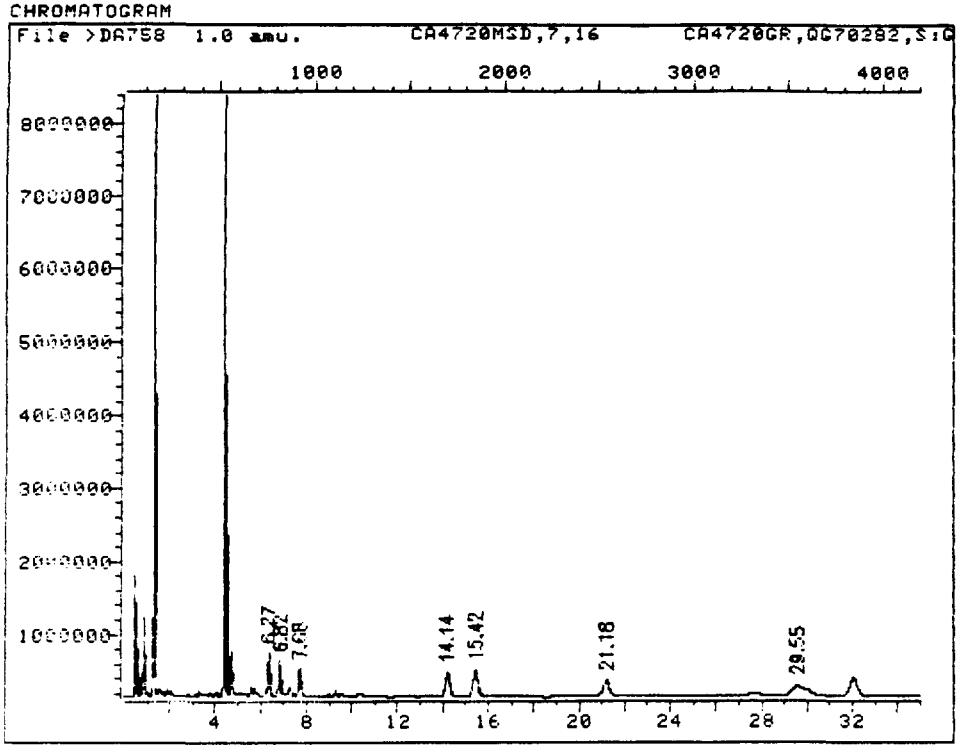
% Moisture: not dec. 14 dec. __ Date Extracted: 10/11/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 10/30/90

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	9.3	U
319-85-7	beta-BHC	9.3	U
319-86-8	delta-BHC	9.3	U
58-89-9	Lindane	7.3	
76-44-8	Heptachlor	58	
309-00-2	Aldrin	57	
1024-57-3	Heptachlor epoxide	9.3	U
959-98-8	Endosulfan I	9.3	U
60-57-1	Dieldrin	110	
72-55-9	4,4'-DDE	19	U
72-20-8	Endrin	160	
33213-65-9	Endosulfan II	19	U
72-54-8	4,4'-DDD	19	U
1031-07-8	Endosulfan sulfate	19	U
50-29-3	4,4'-DDT	160	
72-43-5	Methoxychlor	93	U
53494-70-5	Endrin ketone	19	U
5103-71-9	alpha-Chlordane	93	U
5103-74-2	beta-Chlordane	93	U
8001-35-2	Toxaphene	190	U
12674-11-2	Aroclor-1016	93	U
11104-28-2	Aroclor-1221	93	U
11141-16-5	Aroclor-1232	93	U
53469-21-9	Aroclor-1242	93	U
12672-29-6	Aroclor-1248	93	U
11097-69-1	Aroclor-1254	190	U
11096-82-5	Aroclor-1260	190	U

CHROMATOGRAM



Data File: >DA758::U6 Quant Output File: >DA758::AQ
Name: CA4720MSD,7,16 Instrument ID: DA
Misc: CA4720GR,QG70282,S:G3,1.26,20

Id File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

Operator ID: RK2225
Quant Time: 901101 14:03
Injected at: 901030 10:11

QUANT REPORT Page 1

Operator ID: RK2225 Quant Rev: 7 Quant Time: 901101 14:03
Output File: ^DA758::AQ Injected at: 901030 10:11
Data File: >DA758::U6 Dilution Factor: 1.00000
Name: CA4720MSD,7,16 Instrument ID: DA
Misc: CA4720GR,QG70282,S:G3,1.26,20

ID File: I307DA::US
Title: TSK/PST/PCB--DA--DB1701--2ul
Last Calibration: 901030 16:24

	Compound	R.T.	Scan#	Height	Conc	Units	q
2)	#Gamma-BHC	6.27	753	576387	.0854	UG/ML	100
4)	#Heptachlor	6.82	819	460226	.0746	UG/ML	100
6)	#Aldrin	7.68	921	357442	.0733	UG/ML	100
12)	#Dieldrin	14.14	1697	311617	.143	UG/ML	100
13)	#Endrin	15.42	1850	344962	.201	UG/ML	100
16)	#4,4'-DDT	21.18	2542	207746	.209	UG/ML	100
19)	#Dibutylchlorendate	29.55	3546	133568	.184	UG/ML	100

Compound uses ESTD

RBK
11/01/90

CHAIN OF CUSTODY

ETC Environmental Testing and Certification Corp.

Seal No. 155665 ETC Job # CA4720

CHAIN OF CUSTODY FORM (CC1)

ORIGINAL Date Sealed 90/08/21 By: AS

Company: WASTE MANAGEMENT, INC. Attn.: DEE BRNCICH

Facility/Site: TOWN OF DUNN Phone: (708) 409 - 0700

Address: , DANE COUNTY, WI

SAMPLE IDENTIFICATION

Facility: 405 (Facility/Site Code) SB-15 (142'-150') (Optional Sample Point Descriptions)

Sample Point: X-SLSB15 (Source Code (from below) / Your Sample Point ID (left justify)) 900928 (Start Date (YY/MM/DD)) 1330 (Start Time (2400 hr. clock)) (Elapsed Hours (composite))

Source Codes

Well (W) Outfall (O) Bottom Sediment (B) Surface Impoundment (I) Leachate Collection Sys. (C) Other (X)

Soil (S) River/Stream (R) Generation Point (G) Treatment Facility (T) Lake/Ocean (L) Specify Boring

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
2	UVOA	40	NONE	IFB/VOA	N		✓
1	UVS	40	NONE	UNPRES V. SCREEN	N		✓
1	EXT	500	NONE	IFB/BNA	N		✓
1	EXT	500	NONE	IFB/PST/PCB	N		✓
1	METS	250	NONE	IFB/METALS	N		✓
1	CONU	125	NONE	IFB/CYANIDE		not sufficient sample	need empty

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-27-90 Time: 15:00
   Signature: [signature] Seal #: 0155665 Intact: ✓

2. I have received these materials in good condition from the above person.
   Name: Jay Johnston Signature: [signature]
   Date: 9-9-90 Time: 8:00 pm Remarks:

3. I have received these materials in good condition from the above person.
   Name: Signature:
   Date: Time: Remarks:

4. Shuttle Sealed By: (print) Jay Johnston Date: 9-28-90 Time: 1730
   Signature: [signature] Seal #: 0155666 Intact: yes

LAB USE ONLY Opened By: [signature] Date: 10/1/90 Time: 1215255

SHUTTLE # 001 TEMP. °C 6° SEAL # 155666 COND. Intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
12/89

ETC JOB # CA4720

Sample Point [M] [SW-SB-15] (Source Code / Sample Point I.D.)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)

SAMPLING METHOD: split-spoon samples

Sampler Type [F] — A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel — X-Other (SPECIFY OTHER)

Sampler Material [X] — A-Teflon, B-Metal, C-PVC, D-Plastic — X-Other: stainless steel (SPECIFY OTHER)

Tubing Material [ ] — A-Teflon, B-Tygon, C-Polyethylene, D-Silicon — X-Other (SPECIFY OTHER)

Sample Composited (Y/N): Y — filled bottles from sequential split spoons (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)

Depth to Ground water (ft)

Groundwater Elevation (ft msl)

Well Depth (ft)

Sample Depth (non-well) (ft): 15.00

	ph		spec. cond.		(other parameter)	value	units
1st		(STD)	1st	um/cm at 25° C			
2nd		(STD)	2nd	um/cm at 25°C			
3rd		(STD)	3rd	um/cm at 25°C			
4th		(STD)	4th	um/cm at 25°C			

Sample Temp (°C)

Turbidity NTU

FIELD COMMENTS

Sample Appearance: soil (sandy) with some drilling mud

Weather Conditions: pt cldy 70°

Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler (Print): Jay Johnston

Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

9-28-90 (Date) Jay Johnston (Signature)

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ORIGINAL

ETC Environmental Testing and Certification Corp.

Seal No. 155665 ETC Job # CA4721

CHAIN OF CUSTODY FORM (CC1) ORIGINAL

Date Sealed 90/08/21 By: AS

Company: WASTE MANAGEMENT, INC. Attn.: DEE BRNCICH

Facility/Site: TOWN OF DUNN Phone: (708) 409 - 0700

Address: , DANE COUNTY, WI

SAMPLE IDENTIFICATION

Facility: 405 (Facility/Site Code) SB-15 (142'-150') (Optional Sample Point Descriptions)

Sample Point: X-SLSB15 (Source Code (from below) / Your Sample Point ID (left justify)) 901028 (Start Date (YY/MM/DD)) 1330 (Start Time (2400 hr clock)) (Elapsed Hours (composite))

Source Codes:
Well (W) Soil (S) Outfall (O) River/Stream (R) Bottom Sediment (B) Generation Point (G) Surface Impoundment (I) Treatment Facility (T) Leachate Collection Sys. (C) Lake/Ocean (L) Other (X) Specify Boring

SHUTTLE CONTENTS

BOTTLE No	Type	Size	Preserv.	ANALYSIS	SAMPLER Filt. (Y/N)	SAMPLER Observations	LAB Observations
2	UVOA	40	NONE	IFB/VOA	N		✓
1	UVS	40	NONE	UNPRES V. SCREEN	N		✓
1	EXT	500	NONE	IFB/BNA	N		✓
1	EXT	500	NONE	IFB/PST/PCB		not sufficient sample	✓
1	METS	250	NONE	IFB/METALS	N		✓
1	CONU	125	NONE	IFB/CYANIDE	N		✓
2	VTB	40	GC/MS	TRIPBLANK(VOLATILES)			✓ BUBBLES

CHAIN OF CUSTODY CHRONICLE

1. Shuttle Opened By: (print) DAN GREEN Date: 8-27-90 Time: 15:00
   Signature: Dan Green Seal #: 0155665 Intact: ✓

2. I have received these materials in good condition from the above person.
   Name: Jay Johnston Signature: Jay Johnston
   Date: 9-9-90 Time: 8:00 pm Remarks:

3. I have received these materials in good condition from the above person.
   Name: Signature:
   Date: Time: Remarks:

4. Shuttle Sealed By: (print) Jay Johnston Date: 9-25-90 Time: 1730
   Signature: Jay Johnston Seal #: 0155666 Intact: yes

LAB USE ONLY Opened By: A. Stapleton Date: 10/1/90 Time: 1265

SHUTTLE # 001 TEMP. °C 6° SEAL # 155666 COND. Intact

ETC

FIELD PARAMETER FORM (CC2)

Form 0002
Sample Management
12/89

ETC JOB # CA4721

Sample Point [X] (Source Code) SL1S1B115 (Sample Point I.D)

FIELD PROCEDURES

PURGE DATE (YY MM DD)	START PURGE (2400 Hr Clock)	ELAPSED HRS	WATER VOL. IN CASING (Gallons)	VOLUME PURGED (Gallons)

SAMPLING METHOD: split spoon samples

Sampler Type [F] A-Submersible Pump, B-ISCO, C-Bladder Pump, D-Dipper/Bottle, E-Bailer, F-Scoop/Shovel — X-Other (SPECIFY OTHER)

Sampler Material [X] A-Teflon, B-Metal, C-PVC, D-Plastic — X-Other: stainless steel (SPECIFY OTHER)

Tubing Material [ ] A-Teflon, B-Tygon, C-Polyethylene, D-Silicon — X-Other (SPECIFY OTHER)

Sample Composited [Y/N] filled bottles from sequential split spoons (Procedure/Proportions)

FIELD MEASUREMENTS

Well Elevation (ft/msl)
Depth to Ground water (ft)
Groundwater Elevation (ft msl)
Well Depth (ft)
Sample Depth (non-well) (ft): 15.0.0

	ph	(STD)	spec. cond.	um/cm at 25° C	(other parameter)	value	units
1st		(STD)		um/cm at 25° C			
2nd		(STD)		um/cm at 25°C			
3rd		(STD)		um/cm at 25°C			
4th		(STD)		um/cm at 25°C			

Sample Temp (°C)
Turbidity NTU

FIELD COMMENTS

Sample Appearance: sandy soil with some drilling mud
Weather Conditions: pt cldy 70°
Other:

FILTERING: Use Chain of Custody (CC1) to indicate which bottles were filtered

Sampler: (Print) Jay Johnston Employer: PELA

I certify that sampling procedures were in accordance with applicable EPA state and corporate protocols.

9-26-90 (Date) Jay Johnston (Signature)

ORIGINAL

%M = Wet Soil Weight - Dry Soil Weight / Wet Soil Weight

Dry Weight = 1 - %M/100 x Wet Soil Weight

ETC CORP.

PERCENT MOISTURE WORKSHEET

QC BATCH: 70182

SAMPLE NUMBER	LOG LINK	CRUCIBLE WEIGHT (g)	CRUCIBLE & WET SOIL WEIGHT (g)	WET SOIL WEIGHT (g)	CRUCIBLE & DRY SOIL WEIGHT (g)	DRY SOIL WEIGHT (g)	PERCENT MOISTURE (%)
CA4720	100647	17.87	23.64	5.77	23.53	5.66	1.90
CA4721	↓	18.50	26.26	7.76	26.14	7.64	1.54
CA4720 DUP		18.72	25.10	6.38	24.99	6.27	1.72

COMMENTS:

PERCENT MOISTURE SET-UP: D. Vaile (KW) DATE: 10/10/90

PERCENT MOISTURE COMPLETION: K Waldon DATE: 10/11/90

SUPERVISOR SIGNATURE: K Waldon DATE: 10/11/90

ETC Corp. LABORATORY CHRONICLE : GC-MS Department 025 Page 1 of 1

Date 10/10/90 Instr. D

A-Type 2IFB1VOA
Tune file AFB01
Seq. file KBD1 ,
Method file VOAD
ID file FD0270
CB file CD0270
Analyst K.Boyle
Reviewed by/Date
Batch #'s QV70367

__ Standards Updated
Date By

Tape # Inj. ul

Standard	Conc ppm	Lot No.	Lot Vol. (ul)
BFB	50	9871	1
INT STD+SURR	25	10024	10
CALIB I	50	10091	2,5,10,5,20
CALIB II	50	10092	↓
XVOA	50	9505	↓

01,02,10

R	NAME	DATA File	init. ml/g	ALS #	Dil	Inj. Time	Comments	+ P
	BFB	>D1542	1ml			10:03	OK 179	
	QC70367VS	>D1543	5ml	3		10:38	10ul calc INT, XVOA	
	QC70367VS	>D1544		1		11:25	20ul	
	QC70367VS	>D1545		2	(BuPD Bay)	12:10	5ul	
	QC70367VS	>D1546		4		12:56	5ul	
	QC70367VS	>D1547		5		13:40	2ul	
	QC70367V	>D1548		6		14:25	OK	
	CA4720V	>D1549	5gm	7		16:06	OK	
	CA4721V	>D1550		8		16:53	OK	
	CA4721VS	>D1551		9		17:37	OK 10ul matrix spike	
	CA4721VR	>D1552	↓	10		18:22	OK 10ul " "	

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R : redo , P : Aroclor search , + : Plus search

ETC CORP LAB CHRONICLE Sample Preparation | QC BATCH NO GG70282

JOB NO.	LOGLINK	SYS?	SAMPLE AMT ml gm	MOIST %	DRY WGHT gm	EXTRACT VOL (ml) BNA	pcb/PST	PH	SEP FUNNEL	REPEAT ORIGINAL JOB NO	REPEAT ORIGINAL OS NO.	ATYPES
CH4720	100647	QC	30.01	16	25.21	1.0	20.0	8	VL			2IFB/BNA/PST/PCB IFB/PH/L1
CH4721	100647	QC	30.07	15	25.56	1.0	20.0	7	VL			2IFB/BNA/~~(illegible)~~ PST/PCB
CS70282	VERIFY SPIKE	QS	—	—		1.0	20.0	—	VL			
QC 70282-S	SPDL 10-11		—	—		1.0	20.0	—	VL			
— SB	—											
CH4722 MS	SPDL-10-4	QS	30.04	16	25.23	1.0	20.0	7	VL			
CH4722 MSD	SPDL 10-11	QS	30.10	16	25.28	1.0	20.0	7	VL			
— MSB	—											
— MSC	—											

COMMENTS: DG#00305

PROCEDURE	SIGNATURE	DATE
☐ CONTINUOUS	N/A	
☐ SEP FUNNEL	↓	
☐ SOXHLET	↓	
☒ SONIFICATION	J. Vajda	10.4.90
☐ DILUTION	N/A	
☐ DERIVATION	↓	
☒ CLEANUP	N Jones	10/15/90
☒ SETUP	J. Vajda	10.11.90
☒ CONCENTRATION	BNA 10.12. White QC	10/15/90
☒ SUPERVISOR	J Vajda	10.15.90

MATRIX
- ☐ 1 WATER
- ☒ 2 SOIL
- ☐ 3 COMPLEX
- ☐ 4 ORGANIC LIQ.

UPDATES
- ☐ QS
- ☐ WIP
- ☐ DONE

EHD: 10/11/90

SPIKE	VOL ml	CONC ug/ml	LOT NUMBER
IFB BNA	1.0	100/200	9958
IFB Pest Sp	0.4	2.0/5.0	SP-244

SURROGATES	VOL ml	CONC ug/ml	LOT NUMBER
BNA SURR	1.0	100/200	10010
DBC SURR	0.2	20.0	SP-297

ETC Corp. LABORATORY CHRONICLE : GC-MS Department 97 Page 1 of ___

Date October 18th 1990 Instr. P

A-Type I FB/II NA
Tune file HTP001
Seq. file KV17 ,
Method file BNAR
ID file ID0091
CB file CB0091
Analyst K Vellucci
Reviewed by/Date K. Borglin 11/8/90

Batch #'s Q: 70282

__ Standards Updated
Date Oct 18th 90 By KV

Tape # Q00307 Inj. __ ul

Standard	Conc ppm	Lot No.	Lot Vol.

ETC Corp. LABORATORY CHRONICLE : GC-MS Department 98 Page 1 of 2

Date October 19th 1990 Instr. P

A-Type IFB/BNA
Tune file HTP00
Seq. file KV20
Method file BNAR
ID file IP0092
CB file CP0092
Analyst K. Valiente
Reviewed by/Date

Batch #'s QC70297 ; QC70262 Re-inject.

__ Standards Updated
Date By

Tape # Q00307 Inj. ul

Standard	Conc ppm	Lot No.	Lot Vol.
BNA V	160	SP-368	SP-362
BNA IV	120	SP-367	SP-361
BNA III	80	SP-366	SP-360
BNA II	50	9861	4860
BNA I	20	9P364	SP-358
DFTPP	50	9270	
Int. Std.	4000	9284	

R	NAME	DATA File	Init. ml/g	ALS #	Dil	Inj. Time	Comments	+ P
	DFTPP	>P0221		1		15:33	OK, SCAN 206(e)	
	BNA V; 160ppm	>P0222		2		15:49		
	BNA IV; 121ppm	>P0223		3		16:38	LBLKPD 10-21-90 (CA) CB CAL	
	BNA III; 81ppm	>P0224		4		17:26		
	BNA II; 50ppm	>P0225		5		18:15		
	BNA I; 20ppm	>P0226		6		19:04		
	QC70297C	>P0227		7		19:52	Blank I	
	QC70297C	>P0228		8		20:41	Blank II	
	CA4976C	>P0229		9		21:30		
	CA4976CS	>P0230		10		22:19		
	CA4976CR	>P0231		11		23:07		
	QC70297CS	>P0232		12		23:56		
	QC70282CS	>P0233		13		00:44	Re-inj from QC70282	
	DFTPP	>P0234		1				
	BNA II; 50ppm	>P0235		5			QCAL end Oct 25th 90 KV	
	FB5016C	>P0237		17	1:5		Dilution from QC70277	
	QC70282C	>P0238		18			Re-inj from QC70282	
	CA4721C	>P0239		19			Re-inj from QC70282	

R : redo , P : Aroclor search , + : Plus search

ETC Corp. LABORATORY CHRONICLE : GC-MS Department 99 Page 2 of 2

Date October 19 & 1990 Instr. P

A-Type
Tune file
Seq. file ,
Method file Std page 98
ID file
CB file
Analyst K. Valentine
Reviewed by/Date

Batch #'s QC70297; QC70282
Re-injects

__ Standards Updated
Date By

Tape # Inj. ul

Standard	Conc ppm	Lot No.	Lot Vol.

R	NAME	DATA File	Init. ml/g	ALS #	Dil	Inj. Time	Comments	+ P
	CA4720C	>P0240		20				
	CA4720CS	>P0241		21				
	CA4720CR	>P0242		22				

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R : redo , P : Aroclor search , + : Plus search

ETC CORP LAB CHRONICLE Sample Preparation | QC BATCH NO GG70282

	JOB NO	LOGLINK	TYPE	SAMPLE AMT ml gm	MOIST %	DRY WGHT gm	EXTRACT VOL (ml) BNA	pcb/PST	pH	CODE	REPEAT ORIGINAL JOB NO	REPEAT ORIGINAL OS. NO.	ATYPES
2	CH4720	100647	SO	30.01	16	1.26	1.0	20.0	8	VL			2IFB/BNA/PST/PCB IFB/PH/M
3	CH4721	100647	SO	30.07	15	1.26	1.0	20.0	7	VL			2IFB/BNA/~~(oil)~~ SB PST/PCB
	CS7L282	VERIFY SPIKE	QS	-	-		1.0	20.0	-	VL			
1 QC	70282 LCS	STDL 10-11		-	-		1.0	20.0	-	VL			
	— SA	—											
4	CH4720 MS	STDL 10-4	QS	30.04	16		1.0	20.0	7	VL			
5	CH4720 MSD	STDL 10-11	QS	30.10	16		1.0	20.0	7	VL			
	— MSA	—											
	— MSDA	—											

COMMENTS: SDG #00305

PROCEDURE	SIGNATURE	DATE
☐ CONTINUOUS	N/A	
☐ SEP. FUNNEL	↓	
☐ SOXHLET	↓	
☒ SONICATION	J. Vajda	10.4.90
☐ DILUTION	N/A	
☐ DERIVATION	↓	
☒ CLEANUP	N. Jones	10/15/90
☒ SETUP	J. Vajda	10.11.90
☒ CONCENTRATION	BNA 10.12. Wilson PST	10/15/90
☒ SUPERVISOR	J Vajda	10.15.90

MATRIX
- ☐ 1 WATER
- ☒ 2 SOIL
- ☐ 3 COMPLEX
- ☐ 4 ORGANIC LIQ.

UPDATES
- ☐ QS
- ☐ WIP
- ☐ DONE

END: 10/11/90

SPIKE	VOL ml	CONC ug/ml	LOT NUMBER
IFB BNA	1.0	100/200	9958
IFB Pest Sp	0.4	20/5.0	SP-244

SURROGATES	VOL ml	CONC ug/ml	LOT NUMBER
BNA SuRR	1.0	100/200	10010
DBC SuRR	0.2	20.0	SP-297

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Date 11/01/90 Instr. OA

A-Type
Column DB170
Col. Lot
Calib.File
Seq. File OA1029
Method file IFBPOA
ID file F3670A
Configu. file
Analyst
Reviewed by/Date Randy R. Whitte
Batch #'s QG70307, 70222, 70308

Standard Updated
Date 10/31/90 By RBK

Tape # HCC844 Inj. 2 ul

Standard	Conc. ppm	Lot No.
Sec		
Pbg		