AMERICAN ANALYTICAL TECHNICAL SERVICES

CASE 8656

~~VOLUME I~~

006020

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006020

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
HOUSTON BRANCH
6608 HORNWOOD DRIVE
HOUSTON, TEXAS 77074

Ref. Case No. 8656

Site Name S. Cavalcade

Date: 02/03/88

Subject: CLP Data Review

From: Michael L. Daggett, Chief, Organic Lab Section, 6E-HL

To: Jo Ann Miller, 6H-ES

A review of the laboratory raw data for the reference site has been completed by members of the Laboratory Section. Samples were:

INORGANIC:

ORGANIC: FD732
FD733 FB
FD734 FB

The data was found:

(X) Acceptable

( ) Provisional; use of data requires caution. Problems are noted in Review Summa

( ) Unacceptable; data should not be used. Problems are noted in Review Summary.

Questions regarding the review can be addressed to me.

Attachments

cc: David Stockton, 6E-HL
Duane Geuder, WH-548A

006021

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
HOUSTON BRANCH
6608 HORNWOOD DRIVE
HOUSTON, TEXAS 77074

ORGANIC QA CHECKLIST

Site: S COURCADE
Contract No.: 68-01-7392
Case No.: 8656
Contractor: AATS
Reviewed By: M. EL-FEKY
Matrix: WATER [LOW LEVEL]
Date: 2-3-88
Acct. #: TFACMUS6 SF: TFAJN76

Sample No.: FD 732
FD 733 FB
FD 734 FB

006022

OVERALL COMMENTS (To Be Completed By EPA PERSONNEL)

	VOA	B/N	A	Pest	Other
1. Holding Times	A	A	A	A	
2. Tuning/Performance	A	A	A	A	
3. Calibrations	A	A	A	A	
4. Blanks	A	A	A	A	
5. Surrogates	A	A	A	A	
6. Matrix Spike/Dup	A	A4	A4	A	
7. Compound Identity	A	A	A	A	
8. Case Assessment	A	A	A	A	

COMMENTS OR CLARIFICATIONS (See Attached)

A - Acceptable - All items delivered; all criteria met.

P - Provisional - Data usable; some non-essential review items missing or criteria were not met.

U - Unacceptable - Data unusable; essential review items missing or criteria not met.

COMMENTS/CLARIFICATIONS
REGION VI CLP QA REVIEW

Case 8656 Site S. CAVALCADE Lab AATS

The following is a summary of sample qualifiers used by Region VI in reporting this CLP data:

No.	Acceptable	Provisional	Unacceptable
VOA	3		
BN	2		
A	2		
Pest	2		
Other			

COMMENTS:

1- DATA PACKAGE IS ACCEPTABLE FOR ONE WATER SAMPLE AND TWO FIELD BLANKS. ALL SAMPLES WERE ANALYZED FOR TOTAL ORGANICS, EXCEPT SAMPLE #FD734 WHICH WAS ANALYZED FOR VOA ONLY. ALL SAMPLES ARE CLEAR OF HSL TARGET COMPOUNDS IN ALL FRACTIONS.
2- SAMPLES WERE PREPARED AND ANALYSIS WERE COMPLETED WITHIN THE CONTRACT REQUIRED HOLDING TIME CRITERIA.
3- VOA, BNA AND PESTICIDES SURROGATE RECOVERY ARE WITHIN THE CONTRACT REQUIRED WINDOW.
4- VOA AND PESTICIDES' MS AND MSD RECOVERY ARE ALL WITHIN THE CONTRACT REQUIRED QC LIMITS.
AS OF THE BNA FRACTION, N-NITROSO-DI-N-PROPYL AMINE MS AND MSD RECOVERY AND 4-NITROPHENOL MSD RECOVERY

006023

ORGANIC QA CHECKLIST
CONTINUATION PAGE

CASE NO. 8656

SITE S. CAVALCADE

COMMENTS:

DID NOT MEET THE CONTRACT REQUIRED QC LIMITS. THIS COULD BE DUE TO MATRIX INTERFERENCES.

5- BLANKS ARE CLEAR OF HSL TARGET COMPOUNDS ABOVE 5X CRQL.

6- DFTPP AND BFB GC/MS TUNING AND MASS CALIBRATION RESULTS ARE ACCEPTABLE. NO CALCULATION OR TRANSCRIPTION ERRORS. INTEGRATED SPECTRA ARE IN ORDER.

7- FIVE POINTS AND DAILY CALIBRATIONS ARE ACCEPTABLE. RESPONSE FACTORS FOR SPCC AND RSD FOR CCC ARE ALL WITHIN ACCEPTABLE LIMITS.

8- OVERALL CASE DATA LOOK GOOD, AND CONTRACTUALLY IN COMPLIANCE.

AMERICAN ANALYTICAL TECHNICAL SERVICES

10926 East 55th Place / Tulsa, Oklahoma 74146 / (918) 665-0680

January 14, 1988

CASE NARRATIVE

CONTRACT NO.:	68-01-7392
CASE NO.:	8656
SAMPLE NO.:	FD732, FD733, and FD734
SDG NO.:	FD732

1. Traffic Reports received for this case were assigned Case No. 8657 instead of Case 8656. Sample Management Office requested American Analytical Technical Services to change Traffic Reports to the proper Case Number 8656.

2. Sample No. FD734 was analysed for the volatile fraction only.

3. Due to the software problems, some of the compounds were flagged with "E" on Form I for the Matrix Spike and Matrix Spike Duplicate.

J. D. Shringarpure, Ph. D.
Project Manager

1-14-88
Date

006025

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 – 703 557 2490 • FTS 557 2490

ORGANICS TRAFFIC REPORT

Sample Number: FD 732

① Case Number: po ~~8657~~ 8656 plex phone call

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)

X Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)

X Water
___ Soil/Sediment

④ Ship To:

American Analytical Tstg. Svc.
10926 E. 55th Place
Tulsa, OK 74247
Attn: Jack Wright

Transfer
Ship To:

⑤ Regional Office: VI

Sampling Personnel:

Roger Schenk (Name)
(512) 345-6651 (Phone)

Sampling Date:

1430 (Begin) 12/09/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
Water (Extractable)	2	160 oz.	ND
Water (VOA)	2	80 ml.	1
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ Analysis Lab:
Rec'd by: Paula Siebe
Date Rec'd: 12/10/87

Shipping Information

Federal Express
Name of Carrier

12/09/87
Date Shipped:

1599113294
Airbill Number:

⑧ Sample Description

___ Surface Water
X Ground Water
___ Leachate
___ Mixed Media
___ Solids
___ Other (specify) _____

⑨ Sample Location

SCK-MW23-001
Tag No.'s # 6-04951
6-04952
6-04953
6-04954

Special Handling Instructions:
(e.g., safety precautions, hazardous nature)

002

LAB COPY FOR RETURN TO SMO

006026

006026

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 • 703 557 2490 • FTS 557 2490

ORGANICS TRAFFIC REPORT

Sample Number: FD 733

① Case Number: po ~~8657~~ 8656 per phone call

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)

X Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)

X Water
___ Soil/Sediment

④ Ship To:

American Analytical Tsta. Svc.
10926 E. 55th Place
Tulsa, OK 74247
Attn: Jack Wright

Transfer
Ship To:

⑤ Regional Office: VI

Sampling Personnel:

Roger Schenk (Name)
(512) 345-6657 (Phone)

Sampling Date:
1530 (Begin) 12/03/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	Sample Condition on Receipt (e.g., broken, no ice, Chain-of-Custody, etc.)
Water (Extractable)	2	160 oz.	ND
Water (VOA)	2	80 ml	
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ Analysis Lab:
Rec'd by: 12/10/87
Date Rec'd: Paula Seal
SDG FD 733

Shipping Information

Federal Express
Name of Carrier

12/09/87
Date Shipped:

1599113294
Airbill Number:

⑧ Sample Description

___ Surface Water
___ Ground Water
___ Leachate
___ Mixed Media
___ Solids
X Other (specify) Field Blank

⑨ Sample Location Field Blank
SCK-MW23-FB
Tag No.'s # 6-04955
6-04956
6-04957
6-04958

Special Handling Instructions:
(e.g., safety precautions, hazardous nature)

003

LAB COPY FOR RETURN TO SMO

006027

U.S. ENVIRONMENTAL PROTECTION AGENCY HWI Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 • 703 557-2490 • FTS 557 2490

ORGANICS TRAFFIC REPORT

Sample Number: FD 734

① Case Number: ~~8657~~ 8656 per phone call

Sample Site Name/Code:

② SAMPLE CONCENTRATION (Check One)
X Low Concentration
___ Medium Concentration

③ SAMPLE MATRIX (Check One)
X Water
___ Soil/Sediment

④ Ship To: SDG - Final Sample
American Analytical Tstg. Svc.
10926 E. 55th Place
Tulsa, OK 74247
Attn: Jack Wright

Transfer
Ship To:

⑤ Regional Office: VII
Sampling Personnel:
Roger Schenk (Name)
(512) 345-6651 (Phone)
Sampling Date:
1040 (Begin) 12/09/87 (End)

⑥ For each sample collected specify number of containers used and mark volume level on each bottle.

	Number of Containers	Approximate Total Volume	Sample Condition on Receipt (e.g., broken, no ice, Chain of Custody, etc.)
Water (Extractable)			
Water (VOA)	2	80 ml	ND
Soil/Sediment (Extractable)			
Soil/Sediment (VOA)			
Other			

⑪ Analysis Lab:
Rec'd by: Paula Sieh
Date Rec'd: 12/10/87
SDG - FD 732

006028

⑦ Shipping Information
Federal Express
Name of Carrier
12/09/87
Date Shipped:
1599113294
Airbill Number:

⑧ Sample Description
___ Surface Water
___ Ground Water
___ Leachate
___ Mixed Media
___ Solids
X Other (specify) Trip Blank

⑨ Sample Location Trip Blank
SCK-MW23-TB
Tag No.'s # 6-04959
6-04960

⑩ Special Handling Instructions:
(e.g., safety precautions, hazardous nature)

004

LAB COPY FOR RETURN TO SMO

006028

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

	EPA SAMPLE NO.	S1 (TOL)#	S2 (BFB)#	S3 (DCE)#	OTHER	TOT OUT
1	VBLK	100	97	97		
2	FD732	99	97	97		0
3	FD732MS	100	99	98		0
4	FD732MSD	103	99	98		0
5	FD733	103	99	99		0
6	FD734	101	101	99		0
7						0
8						
9						
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		QC LIMITS
S1 (TOL)	= TOLUENE-D8	(88-110)
S2 (BFB)	= BROMOFLUOROBENZENE	(86-115)
S3 (DCE)	= 1,2-DICHLOROETHANE-D4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II VOA-1

1/87 Rev.

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix Spike - EPA Sample No.: FD732

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
1,1-DICHLOROETHENE	50.	0.	46.	93.	61-145
TRICHLOROETHENE	50.	0.	49.	97.	71-120
BENZENE	50.	0.	53.	105.	76-127
TOLUENE	50.	0.	51.	103.	76-125
CHLOROBENZENE	50.	0.	53.	106.	75-130

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-DICHLOROETHENE	50.	46.	92.	0.	14	61-145
TRICHLOROETHENE	50.	49.	97.	0.	14	71-120
BENZENE	50.	52.	105.	1.	11	76-127
TOLUENE	50.	51.	103.	0.	13	76-125
CHLOROBENZENE	50.	53.	106.	0.	13	75-130

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

* Values outside of QC limits

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

COMMENTS:

FORM III VOA-1 1/87 Rev.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: 5661 Lab Sample ID:_____

Date Analyzed: 12/13/87 Time Analyzed: 5:40

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

Instrument ID: 7002D

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
1	FD732		5668	10:12
2	FD732MS		5669	10:50
3	FD732MSD		5670	11:29
4	FD733		5671	12:08
5	FD734		5672	12:47
6				
7				
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COMMENTS:

006031

FORM IV VOA 1/87 Rev.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: 5489 BFB Injection Date: 12/ 1/87

Instrument ID.: 7002D BFB Injection Time: 16:18

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	19.0
75	30.0 - 60.0% of mass 95	47.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	.0 (.0)1
174	Greater than 50.0% of mass 95	86.1
175	5.0 - 9.0% of mass 174	6.6 (7.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.1 (98.9)1
177	5.0 - 9.0% of mass 176	6.1 (7.1)2

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

006032

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD20		5492	12/ 1/87	17:54
2	VSTD50		5493	12/ 1/87	18:33
3	VSTD100		5494	12/ 1/87	19:12
4	VSTD150		5495	12/ 1/87	19:52
5	VSTD200		5496	12/ 1/87	20:31
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FORM V VOA

008

1/87 Rev.

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: 5659 BFB Injection Date: 12/13/87

Instrument ID.: 7002D BFB Injection Time: 4:46

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	21.9
75	30.0 - 60.0% of mass 95	49.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	.0 (.0)1
174	Greater than 50.0% of mass 95	91.5
175	5.0 - 9.0% of mass 174	7.7 (8.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	89.4 (97.8)1
177	5.0 - 9.0% of mass 176	5.9 (6.7)2

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

006033

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	VSTD50		5660	12/13/87	5:02
2	VBLK		5661	12/13/87	5:40
3	FD732		5668	12/13/87	10:12
4	FD732MS		5669	12/13/87	10:50
5	FD732MSD		5670	12/13/87	11:29
6	FD733		5671	12/13/87	12:08
7	FD734		5672	12/13/87	12:47
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FORM V VOA 1/87 Rev.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5668

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	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-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
10061-02-6	TRANS-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
10061-01-5	CIS-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	XYLENES (TOTAL)	5.	U

006034

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5668

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
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7.					
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9.					
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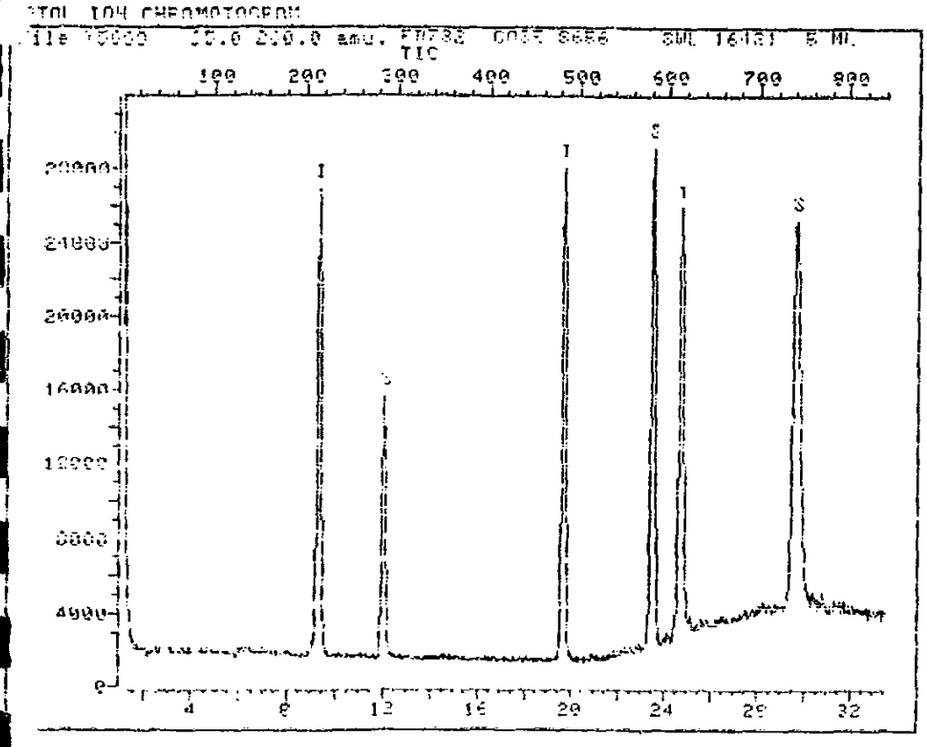
006035

FORM I VOA-TIC 1/87 Rev.



Data File: >5668::L2 Quant Output File: ^5668::L2
Name: FD739 TASK 8656
Misc: SWL 16421 5 ML

Id File: ID 003::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 2002D
Last Calibration: 871213 05:42

Operator ID: DAVID
Quant Time: 871213 10:46
Injected at: 871213 10:12

006036

012

006036

QUANT REPORT

Operator ID: DAVID
Output File: ^5668::L2
Data File: >5668::L2
Name: FD732 CASE 8656
Misc: SWL 16421 5 ML

Quant Rev: 6 Quant Time: 871213 10:46
Injected at: 871213 10:12
Dilution Factor: 1.00000

ID File: ID 003::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.30	128.0	36627	50.00	ng/ml	97
2)	CHLOROMETHANE	0.00	50.0	0	0.00	ng/ml	
3)	BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4)	VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5)	CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6)	METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7)	ACETONE	0.00	43.0	0	0.00	ng/ml	
8)	CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9)	1,1-DICHLOROETHENE	0.00	96.0	0	0.00	ng/ml	
10)	1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11)	1,2-DICHLOROETHENE (TOTAL)	0.00	96.0	0	0.00	ng/ml	
12)	CHLOROFORM	0.00	83.0	0	0.00	ng/ml	
13)	1,2-DICHLOROETHANE	0.00	62.0	0	0.00	ng/ml	
)	1,2-DICHLOROETHANE-D4	12.06	65.1	52418	48.68	ng/ml	98
15)	*1,4-DIFLUOROBENZENE	19.69	114.0	120168	50.00	ng/ml	95
16)	2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17)	1,1,1-TRICHLOROETHANE	0.00	96.9	0	0.00	ng/ml	
18)	CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19)	VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20)	BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21)	1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22)	TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23)	TRICHLOROETHENE	0.00	130.0	0	0.00	ng/ml	
24)	DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25)	1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26)	BENZENE	0.00	78.0	0	0.00	ng/ml	
27)	CIS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
28)	BROMOFORM	0.00	172.8	0	0.00	ng/ml	
29)	*CHLOROBENZENE-D5	24.73	117.0	85531	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31)	2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32)	TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33)	1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34)	TOLUENE	0.00	92.0	0	0.00	ng/ml	
35)	CHLOROBENZENE	0.00	112.0	0	0.00	ng/ml	
36)	ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37)	STYRENE	0.00	104.0	0	0.00	ng/ml	
38)	XYLENES (TOTAL)	0.00	106.0	0	0.00	ng/ml	
)	TOLUENE-D8	23.53	98.0	106439	49.60	ng/ml	98
)	BROMOFLUOROBENZENE	29.70	95.0	83426	48.59	ng/ml	81

* Compound is ISTD

006037

013

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD733

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5671

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	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-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
10061-02-6	TRANS-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
10061-01-5	CIS-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	XYLENES (TOTAL)	5.	U

006038

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD733

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5671

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
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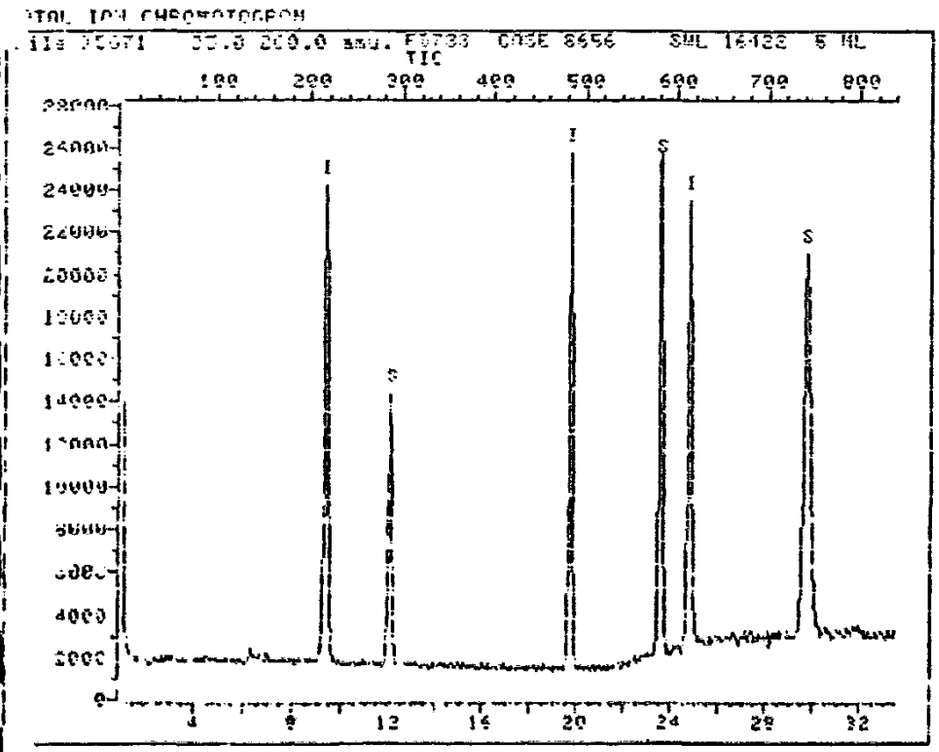
006039

FORM I VOA-TIC 1/87 Rev.



Data File: >5671::L2 Quant Output File: ^5671::L2
Name: FD233 CASE 8656
Misc: SML 16422 5 ML

Id File: ID 003::FX
Title: PRIORITY POLLUTANT ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 70020
Last Calibration: 871213 05:42

Operator ID: DWUID
Quant Time: 871213 12:42
Injected at: 871213 12:08

006040

016

QUANT REPORT

Operator ID: DAVID
Output File: >5671::L2
Data File: >5671::L2
Name: FD733 CASE 8656
Misc: SWL 16492 5 ML

Quant Rev: 6

Quant Time: 871213 12:42
Injected at: 871213 12:08
Dilution Factor: 1.00000

ID File: ID UH3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	9.30	129.0	32134	50.00	ng/ml	97
2) CHLOROMETHANE	9.00	50.0	0	0.00	ng/ml	
3) BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4) VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5) CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6) METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7) ACETONE	0.00	43.0	0	0.00	ng/ml	
8) CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9) 1,1-DICHLOROETHENE	0.00	96.0	0	0.00	ng/ml	
10) 1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11) 1,2-DICHLOROETHENE (TOTAL)	0.00	94.0	0	0.00	ng/ml	
12) CHLOROFORM	0.00	83.0	0	0.00	ng/ml	
13) 1,2-DICHLOROETHANE	0.00	62.0	0	0.00	ng/ml	
14) 1,2-DICHLOROETHANE-D4	12.06	65.1	46977	49.73	ng/ml	96
15) *1,4-DICHLOROBENZENE	19.73	114.0	117541	50.00	ng/ml	93
16) 2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17) 1,1,1-TRICHLOROETHANE	0.00	96.9	0	0.00	ng/ml	
18) CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19) VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20) BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21) 1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22) TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23) TRICHLOROETHENE	0.00	130.0	0	0.00	ng/ml	
24) DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25) 1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26) BENZENE	0.00	78.0	0	0.00	ng/ml	
27) CIS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
28) BROMOFORM	0.00	172.8	0	0.00	ng/ml	
29) *CHLOROBENZENE-D5	24.77	117.0	24622	50.00	ng/ml	99
30) 4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31) 2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32) TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33) 1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34) TOLUENE	0.00	92.0	0	0.00	ng/ml	
35) CHLOROBENZENE	0.00	112.0	0	0.00	ng/ml	
36) ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37) STYRENE	0.00	104.0	0	0.00	ng/ml	
38) XYLENES (TOTAL)	0.00	106.0	0	0.00	ng/ml	
39) TOLUENE-D8	23.53	84.0	96210	51.39	ng/ml	98
40) BROMOFLUOROBENZENE	29.73	95.0	74161	49.51	ng/ml	87

* Compound is ISTD

006041

C17

006041

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD734

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5672

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	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-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
10061-02-6	TRANS-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
10061-01-5	CIS-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	XYLENES (TOTAL)	5.	U

006042

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD734

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5672

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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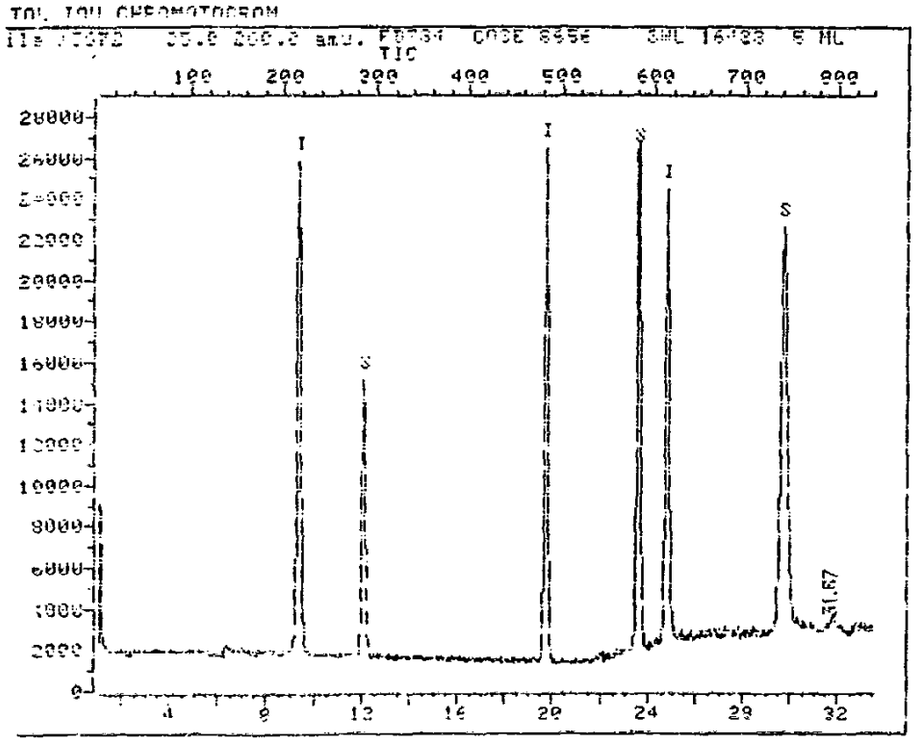
006043

FORM I VOA-TIC 1/87 Rev.

TOT. ION CHROMATOGRAM



Data File: >5672::L2 Quant Output File: ^5672::L2
Name: FD73a CASE 8656
Misc: SWL 16423 5 ML

Id File: ID 003::FX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

Operator ID: DAVID
Quant Time: 871213 13:21
Injected at: 871213 12:47

006044

020

006044

QUANT REPORT

Operator ID: DAVID
Output File: ^5672::L2
Data File: >5672::L2
Name: FD734 CASE 8656
Misc: SWL 16423 5 ML

Quant Rev: 6

Quant Time: 871213 13:21
Injected at: 871213 12:47
Dilution Factor: 1.00000

ID File: ID_003::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

Compound	R.T.	Q ion	Area	Conc	Units	%
1) *BROMOCHLOROMETHANE	9.34	128.0	33791	50.00	ng/ml	92
2) CHLOROMETHANE	0.00	50.0	0	0.00	ng/ml	
3) BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4) VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5) CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6) METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7) ACETONE	0.00	43.0	0	0.00	ng/ml	
8) CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9) 1,1-DICHLOROETHENE	0.00	96.0	0	0.00	ng/ml	
10) 1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11) 1,2-DICHLOROETHENE (TOTAL)	0.00	96.0	0	0.00	ng/ml	
12) CHLOROFORM	0.00	83.0	0	0.00	ng/ml	
13) 1,2-DICHLOROETHANE	0.00	65.0	0	0.00	ng/ml	
14) 1,2-DICHLOROETHANE-D4	12.06	65.1	49277	49.60	ng/ml	98
15) *1,4-DIFLUOROBENZENE	19.23	114.0	110966	50.00	ng/ml	93
16) 2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17) 1,1,1-TRICHLOROETHANE	0.00	94.9	0	0.00	ng/ml	
18) CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19) VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20) BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21) 1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22) TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23) TRICHLOROETHENE	0.00	130.0	0	0.00	ng/ml	
24) DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25) 1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26) BENZENE	0.00	78.0	0	0.00	ng/ml	
27) CIS-1,3-DICHLOROPROPENE	0.00	74.0	0	0.00	ng/ml	
28) BROMOFORM	0.00	172.8	0	0.00	ng/ml	
29) *CHLOROBENZENE-D5	24.22	117.0	80105	50.00	ng/ml	98
30) 4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31) 2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32) TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33) 1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34) TOLUENE	0.00	92.0	0	0.00	ng/ml	
35) CHLOROBENZENE	0.00	112.0	0	0.00	ng/ml	
36) ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37) STYRENE	0.00	104.0	0	0.00	ng/ml	
38) XYLENES (TOTAL)	31.67	106.0	3320	.31	ng/ml	29
39) TOLUENE-D8	23.53	98.0	101266	50.38	ng/ml	98
40) BROMOFLUOROBENZENE	29.23	95.0	80941	50.34	ng/ml	80

* Compound is ISTD

006045

021

006045

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 7002D Calibration Date(s): 12/ 1/87 12/ 1/87

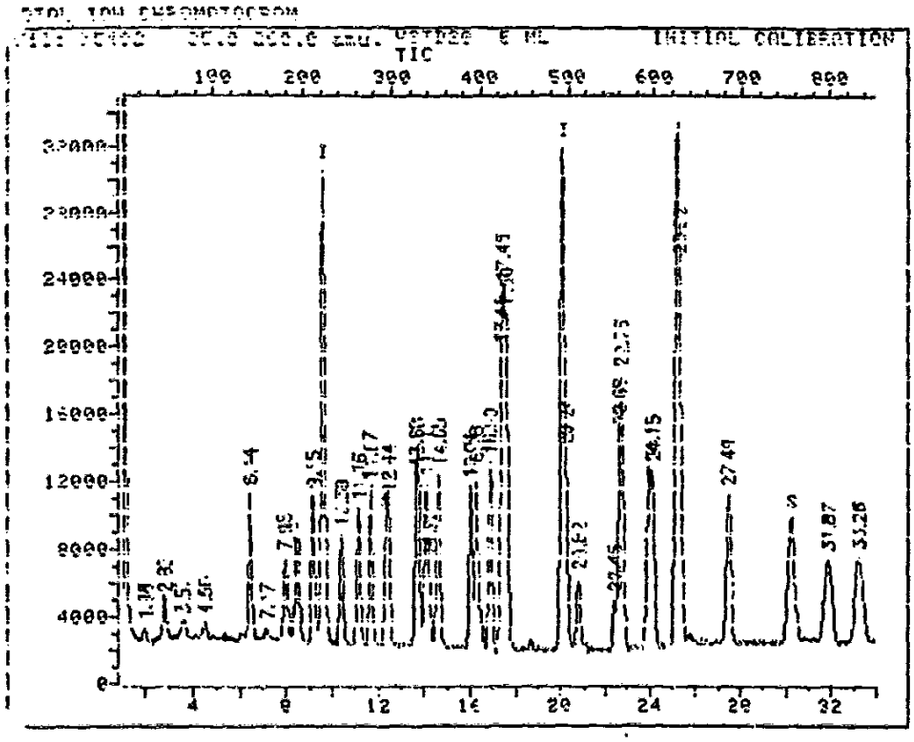
Matrix:(soil/water) WATER Level:(low/med): LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = .300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = 5492 RRF50 = 5493
RRF100= 5494 RRF150= 5495 RRF200= 5496

COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
CHLOROMETHANE #	.327	.477	.680	.484	.483	.490	25.5#
BROMOMETHANE	.642	.751	.757	.586	.552	.658	14.3
VINYL CHLORIDE *	.609	.747	.811	.684	.648	.700	11.5*
CHLOROETHANE	.424	.527	.548	.541	.547	.517	10.2
METHYLENE CHLORIDE	1.215	.924	1.433	1.014	1.069	1.131	17.6
ACETONE	.305	.318	.280	.312	.321	.307	5.3
CARBON DISULFIDE	2.761	3.434	3.491	3.549	3.735	3.394	10.9
1,1-DICHLOROETHENE *	1.084	1.293	1.288	1.308	1.358	1.266	8.3*
1,1-DICHLOROETHANE #	2.175	2.653	2.757	2.863	2.959	2.681	11.4#
1,2-DICHLOROETHENE (TOTAL)	1.079	1.282	1.332	1.368	1.402	1.292	9.9
CHLOROFORM *	2.521	2.859	2.909	3.012	3.062	2.873	7.4*
1,2-DICHLOROETHANE	1.641	1.984	2.031	2.157	2.209	2.004	11.1
2-BUTANONE	.139	.188	.178	.195	.212	.182	14.9
1,1,1-TRICHLOROETHANE	.447	.529	.533	.538	.558	.521	8.3
CARBON TETRACHLORIDE	.588	.709	.698	.714	.754	.692	9.0
VINYL ACETATE	.236	.409	.312	.424	.460	.368	25.0
BROMODICHLOROMETHANE	.722	.835	.869	.892	.928	.849	9.3
1,2-DICHLOROPROPANE *	.416	.493	.519	.532	.562	.505	10.9*
TRANS-1,3-DICHLOROPROPENE	.392	.484	.506	.523	.544	.490	12.0
TRICHLOROETHENE	.430	.507	.502	.507	.526	.495	7.5
DIBROMOCHLOROMETHANE	.749	.876	.889	.915	.935	.873	8.3
1,1,2-TRICHLOROETHANE	.341	.395	.392	.402	.410	.388	7.0
BENZENE	.822	.957	.960	.962	.992	.938	7.1
CIS-1,3-DICHLOROPROPENE	.463	.569	.597	.624	.655	.582	12.6
BROMOFORM #	.509	.599	.621	.656	.684	.614	10.9#
4-METHYL-2-PENTANONE	.564	.800	.694	.810	.873	.748	16.2
2-HEXANONE	.427	.642	.485	.513	.559	.525	15.4
TETRACHLOROETHENE	.503	.674	.566	.577	.593	.583	10.5
1,1,2,2-TETRACHLOROETHANE #	.689	.954	.860	.930	.969	.880	13.1#
TOLUENE *	.623	.853	.729	.753	.777	.747	11.2*
CHLOROBENZENE #	.886	1.213	1.029	1.071	1.095	1.059	11.2#
ETHYLBENZENE *	.401	.565	.473	.493	.513	.489	12.3*
STYRENE	.796	1.139	.956	1.009	1.051	.990	12.9
XYLENES (TOTAL)	.483	.684	.582	.608	.627	.597	12.3
TOLUENE-D8	1.089	1.376	1.234	1.251	1.232	1.236	8.2
BROMOFLUOROBENZENE	.775	.992	.884	.902	.905	.892	8.7
1,2-DICHLOROETHANE-D4	1.403	1.593	1.687	1.754	1.719	1.631	8.6

FORM VI VOA 1/87 Rev.



Data File: >5492::L2 Quant Output File: ^5492::L2
Name: VSTD20 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

Operator ID: DAVID
Quant Time: 871201 22:39
Injected at: 871201 17:54

006047

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006047

QUANT REPORT

Operator ID: DAVID
Output File: ^5492::L2
Data File: >5492::L2
Name: VSTD20 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

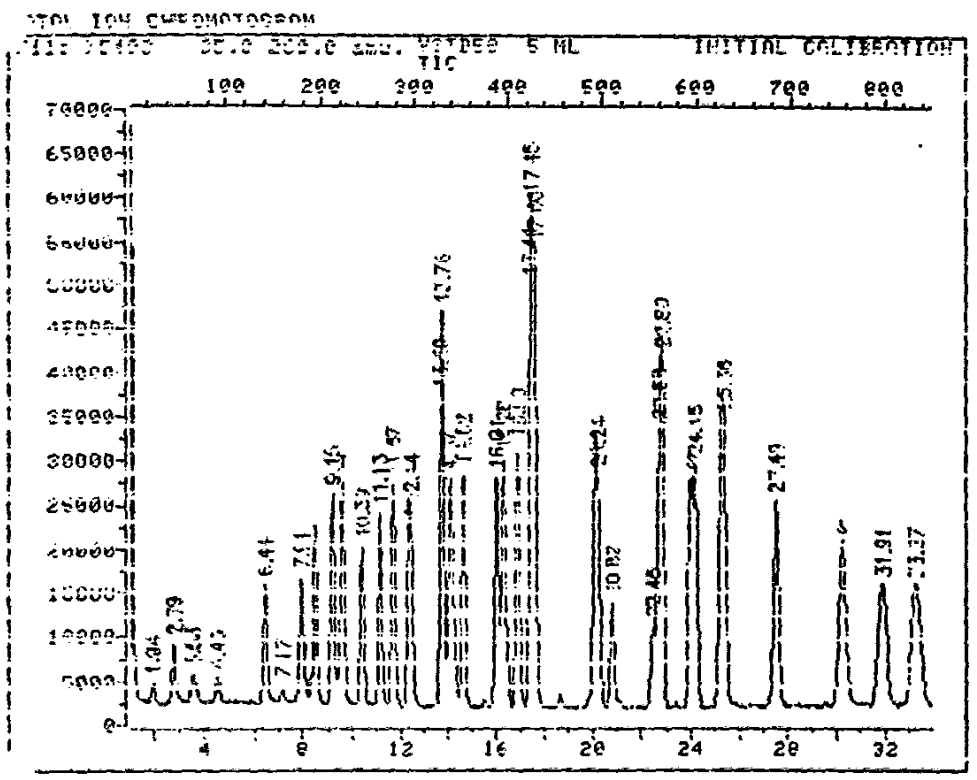
Quant Rev: 6
Quant Time: 871201 22:39
Injected at: 871201 17:54
Dilution Factor: 1.00000

ID File: ID_V03::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.58	128.0	49415	50.00	ng/ml	97
2)	CHLOROMETHANE	1.98	50.0	5291	11.13	ng/ml	91
3)	BROMOMETHANE	2.83	94.0	10378	17.02	ng/ml	99
4)	VINYL CHLORIDE	3.57	62.0	9852	15.34	ng/ml	100
5)	CHLOROETHANE	4.50	64.0	6850	16.23	ng/ml	100
6)	METHYLENE CHLORIDE	6.44	84.0	19638	19.81	ng/ml	90
7)	ACETONE	7.17	43.0	4938	21.31	ng/ml	95
8)	CARBON DISULFIDE	7.95	76.0	44639	16.59	ng/ml	97
9)	1,1-DICHLOROETHENE	9.15	96.0	15773	15.71	ng/ml	92
10)	1,1-DICHLOROETHANE	10.39	63.0	35166	16.48	ng/ml	97
11)	1,2-DICHLOROETHENE (TOTAL)	11.16	96.0	17440	16.86	ng/ml	95
12)	CHLOROFORM	11.67	83.0	40760	17.78	ng/ml	98
[illegible])	1,2-DICHLOROETHANE	12.44	62.0	26521	16.58	ng/ml	99
14)	1,2-DICHLOROETHANE-D4.	12.33	65.1	22676	17.78	ng/ml	98
15)	*1,4-DIFLUOROBENZENE	20.08	114.0	130718	50.00	ng/ml	94
16)	2-BUTANONE	12.44	43.0	7251	15.91	ng/ml	90
17)	1,1,1-TRICHLOROETHANE	13.68	96.9	23354	16.80	ng/ml	91
18)	CARBON TETRACHLORIDE	14.11	117.0	30741	16.74	ng/ml	97
19)	VINYL ACETATE	14.23	43.0	12345	16.25	ng/ml	100
20)	BROMODICHLOROMETHANE	14.65	83.0	37734	17.33	ng/ml	98
21)	1,2-DICHLOROPROPANE	16.01	63.0	21772	16.91	ng/ml	97
22)	TRANS-1,3-DICHLOROPROPENE	17.60	75.0	23591	18.72	ng/ml	98
23)	TRICHLOROETHENE	16.90	130.0	22500	17.10	ng/ml	92
24)	DIBROMOCHLOROMETHANE	17.45	129.0	39175	17.31	ng/ml	93
25)	1,1,2-TRICHLOROETHANE	17.60	97.0	17846	17.79	ng/ml	92
26)	BENZENE	17.41	78.0	43003	17.50	ng/ml	96
27)	CIS-1,3-DICHLOROPROPENE	16.28	75.0	33894	22.92	ng/ml	94
28)	BROMOFORM	20.24	172.8	26595	17.40	ng/ml	99
29)	*CHLOROBENZENE-D5	25.20	117.0	103643	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	20.82	43.0	23606	14.11	ng/ml	88
31)	2-HEXANONE	22.45	43.0	17682	14.06	ng/ml	97
32)	TETRACHLOROETHENE	22.76	164.0	20866	14.93	ng/ml	96
33)	1,1,2,2-TETRACHLOROETHANE	22.68	83.0	28549	14.29	ng/ml	92
34)	TOLUENE	24.15	92.0	25829	14.53	ng/ml	98
35)	CHLOROBENZENE	25.32	112.0	36720	14.97	ng/ml	94
36)	ETHYLBENZENE	27.49	106.0	16611	14.50	ng/ml	47
37)	STYRENE	31.87	104.0	32982	14.35	ng/ml	94
38)	XYLENES (TOTAL)	33.26	106.0	20036	14.35	ng/ml	92
[illegible])	TOLUENE-D8	23.96	98.0	45157	15.85	ng/ml	99
40)	BROMOFLUOROBENZENE	30.20	95.0	32133	15.76	ng/ml	91

* Compound is ISTD

006048



Data File: >5493::L2 Quant Output File: ^5493::L2
Name: USTD50 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

Operator ID: DAVID
Quant Time: 871201 22:41
Injected at: 871201 18:33

006049

QUANT REPORT

Operator ID: DAVID Quant Rev: 6 Quant Time: 871201 22:41
Output File: ^5493::L2 Injected at: 871201 18:33
Data File: >5493::L2 Dilution Factor: 1.00000
Name: VSTD50 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

ID File: ID_003::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.58	128.0	35194	50.00	ng/ml	90
2)	CHLOROMETHANE	1.94	50.0	16777	40.52	ng/ml	99
3)	BROMOMETHANE	2.79	94.0	26445	49.81	ng/ml	99
4)	VINYL CHLORIDE	3.53	62.0	26300	47.02	ng/ml	100
5)	CHLOROETHANE	4.46	64.0	18549	50.48	ng/ml	100
6)	METHYLENE CHLORIDE	6.44	84.0	32533	37.69	ng/ml	86
7)	ACETONE	7.17	43.0	11185	55.42	ng/ml	83
8)	CARBON DISULFIDE	7.91	76.0	120841	51.58	ng/ml	98
9)	1,1-DICHLOROETHENE	9.15	96.0	40948	46.85	ng/ml	94
10)	1,1-DICHLOROETHANE	10.39	63.0	93370	50.26	ng/ml	98
11)	1,2-DICHLOROETHENE (TOTAL)	11.13	96.0	45102	50.08	ng/ml	96
)	CHLOROFORM	11.67	83.0	100622	50.40	ng/ml	96
)	1,2-DICHLOROETHANE	12.44	62.0	69810	50.12	ng/ml	99
14)	1,2-DICHLOROETHANE-D4	12.33	65.1	56056	50.48	ng/ml	97
15)	*1,4-DIFLUOROBENZENE	20.08	114.0	115234	50.00	ng/ml	94
16)	2-BUTANONE	12.44	43.0	21610	53.79	ng/ml	85
17)	1,1,1-TRICHLOROETHANE	13.69	96.9	61006	49.77	ng/ml	89
18)	CARBON TETRACHLORIDE	14.07	117.0	81687	50.45	ng/ml	98
19)	VINYL ACETATE	13.76	43.0	47180	70.44	ng/ml	100
20)	BROMODICHLOROMETHANE	14.62	83.0	96222	50.13	ng/ml	98
21)	1,2-DICHLOROPROPANE	16.01	63.0	56862	50.10	ng/ml	98
22)	TRANS-1,3-DICHLOROPROPENE	17.60	75.0	64194	57.77	ng/ml	98
23)	TRICHLOROETHENE	16.90	130.0	58422	50.36	ng/ml	99
24)	DIBROMOCHLOROMETHANE	17.45	129.0	100965	50.60	ng/ml	97
25)	1,1,2-TRICHLOROETHANE	17.60	97.0	45510	51.45	ng/ml	89
26)	BENZENE	17.41	78.0	110234	50.90	ng/ml	96
27)	CIS-1,3-DICHLOROPROPENE	16.28	75.0	91812	70.42	ng/ml	94
28)	BROMOFORM	20.24	172.8	69016	51.23	ng/ml	99
29)	*CHLOROBENZENE-D5	25.20	117.0	78592	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	20.82	43.0	63488	50.05	ng/ml	86
31)	2-HEXANONE	22.45	43.0	50464	52.92	ng/ml	90
32)	TETRACHLOROETHENE	22.80	164.0	52933	49.95	ng/ml	96
33)	1,1,2,2-TETRACHLOROETHANE	22.68	83.0	74968	49.47	ng/ml	97
34)	TOLUENE	24.15	92.0	67048	49.75	ng/ml	96
35)	CHLOROBENZENE	25.36	112.0	95366	51.27	ng/ml	93
36)	ETHYLBENZENE	27.49	106.0	44378	51.07	ng/ml	47
37)	STYRENE	31.91	104.0	89543	51.36	ng/ml	94
)	XYLENES (TOTAL)	33.27	106.0	53736	50.75	ng/ml	93
39)	TOLUENE-D8	23.96	98.0	108120	50.06	ng/ml	98
40)	BROMOFLUOROBENZENE	30.20	95.0	77956	50.42	ng/ml	88

* Compound is ISTD

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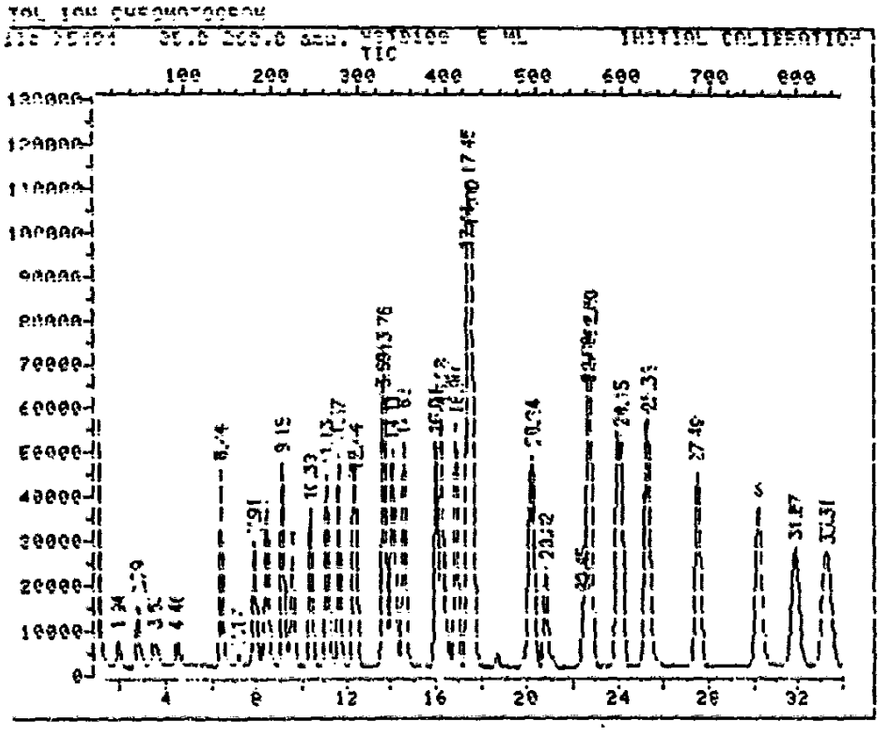

Data File: >5494::L2 Quant Output File: ^5494::L2
Name: VSTD100 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

Operator ID: DAVID
Quant Time: 871201 22:43
Injected at: 871201 19:12

006051

QUANT REPORT

Operator ID: DAVID Quant Rev: 6 Quant Time: 871201 22:43
Output File: ^5494::L2 Injected at: 871201 19:12
Data File: >5494::L2 Dilution Factor: 1.00000
Name: USTD100 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

ID File: ID_UN3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.58	128.0	32747	50.00	ng/ml	91
2)	CHLOROMETHANE	1.94	50.0	44508	115.54	ng/ml	99
3)	BROMOMETHANE	2.79	94.0	49555	100.31	ng/ml	98
4)	VINYL CHLORIDE	3.53	62.0	53104	102.04	ng/ml	100
5)	CHLOROETHANE	4.46	64.0	35908	105.03	ng/ml	100
6)	METHYLENE CHLORIDE	6.44	84.0	93882	116.90	ng/ml	88
7)	ACETONE	7.17	43.0	18328	97.60	ng/ml	87
8)	CARBON DISULFIDE	7.91	76.0	228659	104.90	ng/ml	99
9)	1,1-DICHLOROETHENE	9.15	96.0	75944	93.37	ng/ml	95
10)	1,1-DICHLOROETHANE	10.39	63.0	180544	104.45	ng/ml	97
11)	1,2-DICHLOROETHENE (TOTAL)	11.13	96.0	87230	104.09	ng/ml	95
12)	CHLOROFORM	11.67	83.0	190519	102.56	ng/ml	99
13)	1,2-DICHLOROETHANE	12.44	62.0	133040	102.65	ng/ml	99
14)	1,2-DICHLOROETHANE-D4	12.33	65.1	110499	106.94	ng/ml	96
15)	*1,4-DIFLUOROBENZENE	20.08	114.0	106822	50.00	ng/ml	93
16)	2-BUTANONE	12.44	43.0	38132	102.39	ng/ml	85
17)	1,1,1-TRICHLOROETHANE	13.69	96.9	113978	100.31	ng/ml	90
18)	CARBON TETRACHLORIDE	14.11	117.0	149199	99.40	ng/ml	97
19)	VINYL ACETATE	13.76	43.0	66649	107.34	ng/ml	100
20)	BROMODICHLOROMETHANE	14.62	83.0	185654	104.35	ng/ml	99
21)	1,2-DICHLOROPROPANE	16.01	63.0	110875	105.39	ng/ml	97
22)	TRANS-1,3-DICHLOROPROPENE	17.10	75.0	124333	120.70	ng/ml	96
23)	TRICHLOROETHENE	16.90	130.0	107273	99.75	ng/ml	99
24)	DIBROMOCHLOROMETHANE	17.45	129.0	189893	102.66	ng/ml	98
25)	1,1,2-TRICHLOROETHANE	17.60	97.0	83751	102.14	ng/ml	90
26)	BENZENE	17.41	78.0	204994	102.10	ng/ml	99
27)	CIS-1,3-DICHLOROPROPENE	16.28	75.0	178562	147.75	ng/ml	94
28)	BROMOFORM	20.24	172.8	132638	106.20	ng/ml	99
29)	*CHLOROBENZENE-D5	25.20	117.0	85360	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	20.82	43.0	119528	86.75	ng/ml	85
31)	2-HEXANONE	22.45	43.0	82800	79.95	ng/ml	91
32)	TETRACHLOROETHENE	22.80	164.0	96654	83.97	ng/ml	96
33)	1,1,2,2-TETRACHLOROETHANE	22.68	83.0	146852	89.23	ng/ml	97
34)	TOLUENE	24.15	92.0	124502	85.06	ng/ml	95
35)	CHLOROBENZENE	25.36	112.0	175611	86.92	ng/ml	94
36)	ETHYLBENZENE	27.49	106.0	80813	85.63	ng/ml	48
37)	STYRENE	31.87	104.0	163219	86.20	ng/ml	96
38)	XYLENES (TOTAL)	33.31	106.0	99320	86.36	ng/ml	91
39)	TOLUENE-D8	23.96	98.0	210613	89.78	ng/ml	97
40)	BROMOFLUOROBENZENE	30.24	95.0	150940	89.88	ng/ml	92

* Compound is ISTD

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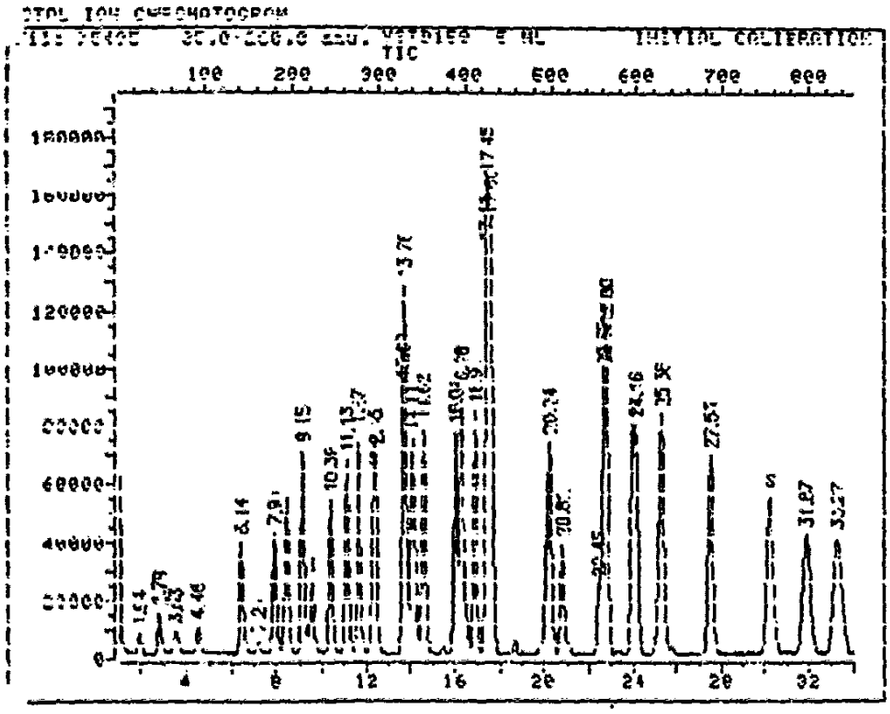

Data File: >5495::L2 Quant Output File: ^5495::L2
Name: VSTD150 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

Operator ID: DAVID
Quant Time: 871201 22:44
Injected at: 871201 19:52

006053

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006053

QUANT REPORT

Operator ID: DAVID
Output File: ^5495::L2
Data File: >5495::L2
Name: VSTD150 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Quant Rev: 6
Quant Time: 871201 22:44
Injected at: 871201 19:52
Dilution Factor: 1.00000

ID File: ID_VM3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.58	128.0	31875	50.00	ng/ml	88
2)	CHLOROMETHANE	1.94	50.0	46278	123.42	ng/ml	99
3)	BROMOMETHANE	2.79	94.0	56034	116.53	ng/ml	98
4)	VINYL CHLORIDE	3.53	62.0	65368	129.04	ng/ml	100
5)	CHLOROETHANE	4.46	64.0	51710	155.39	ng/ml	100
6)	METHYLENE CHLORIDE	6.44	84.0	97001	124.09	ng/ml	87
7)	ACETONE	7.21	43.0	29799	163.02	ng/ml	86
8)	CARBON DISULFIDE	7.91	76.0	339383	159.95	ng/ml	98
9)	1,1-DICHLOROETHENE	9.15	96.0	112545	142.16	ng/ml	92
10)	1,1-DICHLOROETHANE	10.39	63.0	273734	162.69	ng/ml	99
11)	1,2-DICHLOROETHENE (TOTAL)	11.13	96.0	130785	160.33	ng/ml	95
12)	CHLOROFORM	11.67	83.0	288009	159.29	ng/ml	99
13)	1,2-DICHLOROETHANE	12.45	62.0	206271	163.51	ng/ml	99
14)	1,2-DICHLOROETHANE-D4	12.33	65.1	167707	166.74	ng/ml	96
15)	*1,4-DIFLUOROBENZENE	20.09	114.0	105234	50.00	ng/ml	92
16)	2-BUTANONE	12.45	43.0	61474	167.55	ng/ml	82
17)	1,1,1-TRICHLOROETHANE	13.69	96.9	169790	151.68	ng/ml	90
18)	CARBON TETRACHLORIDE	14.11	117.0	225304	152.36	ng/ml	95
19)	VINYL ACETATE	13.76	43.0	133827	218.79	ng/ml	100
20)	BROMODICHLOROMETHANE	14.62	83.0	281750	160.75	ng/ml	99
21)	1,2-DICHLOROPROPANE	16.01	63.0	167948	162.05	ng/ml	97
22)	TRANS-1,3-DICHLOROPROPENE	17.60	75.0	189700	186.94	ng/ml	97
23)	TRICHLOROETHENE	16.91	130.0	160160	151.17	ng/ml	97
24)	DIBROMOCHLOROMETHANE	17.45	129.0	289017	158.61	ng/ml	98
25)	1,1,2-TRICHLOROETHANE	17.60	97.0	126973	157.19	ng/ml	88
26)	BENZENE	17.41	78.0	303557	153.48	ng/ml	98
27)	CIS-1,3-DICHLOROPROPENE	16.28	75.0	275670	231.54	ng/ml	94
28)	BROMOFORM	20.24	172.8	207131	168.35	ng/ml	98
29)	*CHLOROBENZENE-D5	25.21	117.0	83453	50.00	ng/ml	96
30)	4-METHYL-2-PENTANONE	20.82	43.0	204776	152.02	ng/ml	84
31)	2-HEXANONE	22.45	43.0	128500	126.91	ng/ml	90
32)	TETRACHLOROETHENE	22.80	164.0	144560	128.47	ng/ml	96
33)	1,1,2,2-TETRACHLOROETHANE	22.68	83.0	232871	144.73	ng/ml	97
34)	TOLUENE	24.16	92.0	188435	131.68	ng/ml	96
35)	CHLOROBENZENE	25.36	112.0	268028	135.69	ng/ml	94
36)	ETHYLBENZENE	27.53	106.0	123372	133.72	ng/ml	47
37)	STYRENE	31.87	104.0	252608	136.45	ng/ml	96
38)	XYLENES (TOTAL)	33.27	106.0	152239	135.40	ng/ml	88
39)	TOLUENE-D8	23.96	98.0	313108	136.52	ng/ml	98
40)	BROMOFLUOROBENZENE	30.24	95.0	225868	137.57	ng/ml	92

* Compound is ISTD

006054

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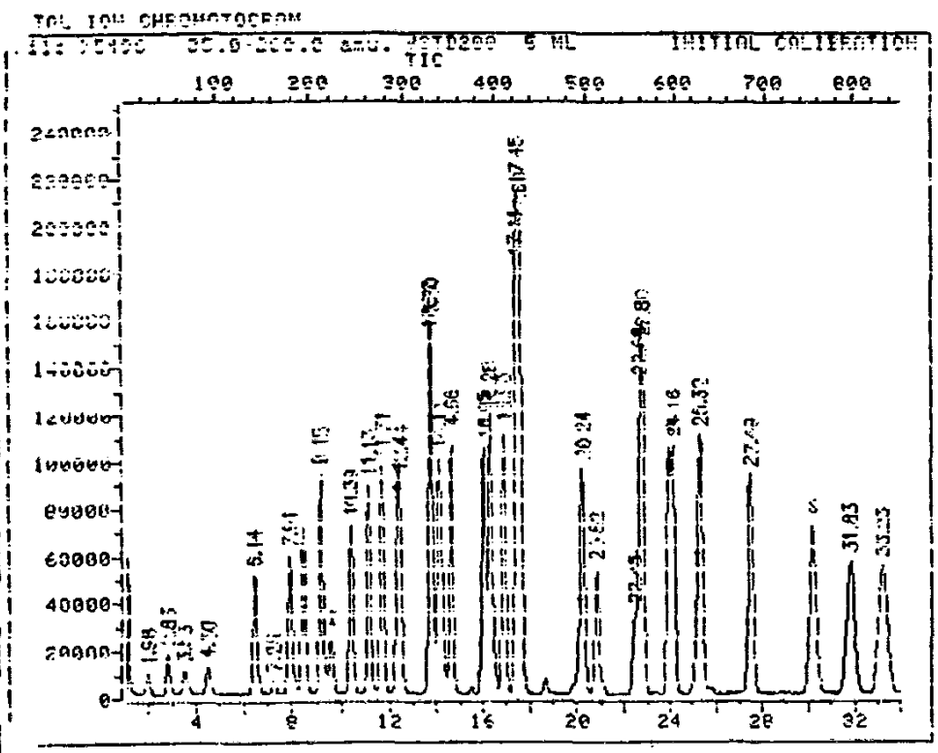
006054



Data File: >5496::L2 Quant Output File: ^5496::L2
Name: VSTD200 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

Operator ID: DAVID
Quant Time: 871201 22:46
Injected at: 871201 20:31

006055

QUANT REPORT

Operator ID: DAVID Quant Rev: 6 Quant Time: 871201 22:46
Output File: ^5496::L2 Injected at: 871201 20:31
Data File: >5496::L2 Dilution Factor: 1.00000
Name: USTD200 5 ML
Misc: INITIAL CALIBRATION STD 1-141-3

ID File: ID_U03::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871201 22:16

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.58	128.0	31392	50.00	ng/ml	90
2)	CHLOROMETHANE	1.98	50.0	60638	164.20	ng/ml	99
3)	BROMOMETHANE	2.83	94.0	69286	146.31	ng/ml	97
4)	VINYL CHLORIDE	3.53	62.0	81354	163.07	ng/ml	100
5)	CHLOROETHANE	4.50	64.0	68677	209.55	ng/ml	100
6)	METHYLENE CHLORIDE	6.44	84.0	134257	174.39	ng/ml	87
7)	ACETONE	7.25	43.0	40249	223.58	ng/ml	89
8)	CARBON DISULFIDE	7.91	76.0	468673	224.28	ng/ml	98
9)	1,1-DICHLOROETHENE	9.15	96.0	153453	196.82	ng/ml	93
10)	1,1-DICHLOROETHANE	10.39	63.0	371530	224.21	ng/ml	97
11)	1,2-DICHLOROETHENE (TOTAL)	11.13	96.0	176059	219.15	ng/ml	95
	CHLOROFORM	11.71	83.0	384480	215.91	ng/ml	97
13)	1,2-DICHLOROETHANE	12.44	62.0	277367	223.25	ng/ml	99
14)	1,2-DICHLOROETHANE-D4	12.33	65.1	215892	217.95	ng/ml	99
15)	*1,4-DIFLUOROBENZENE	20.08	114.0	100990	50.00	ng/ml	92
16)	2-BUTANONE	12.44	43.0	85464	242.72	ng/ml	85
17)	1,1,1-TRICHLOROETHANE	13.72	96.9	225409	209.83	ng/ml	89
18)	CARBON TETRACHLORIDE	14.11	117.0	304447	214.54	ng/ml	97
19)	VINYL ACETATE	13.80	43.0	185712	316.37	ng/ml	100
20)	BROMODICHLOROMETHANE	14.66	83.0	374764	222.80	ng/ml	99
21)	1,2-DICHLOROPROPANE	16.05	63.0	227123	228.36	ng/ml	97
22)	TRANS-1,3-DICHLOROPROPENE	17.60	75.0	252675	259.46	ng/ml	96
23)	TRICHLOROETHENE	16.90	130.0	212666	209.17	ng/ml	99
24)	DIBROMOCHLOROMETHANE	17.45	129.0	377555	215.91	ng/ml	98
25)	1,1,2-TRICHLOROETHANE	17.60	97.0	165528	213.53	ng/ml	89
26)	BENZENE	17.41	78.0	400565	211.04	ng/ml	99
27)	CIS-1,3-DICHLOROPROPENE	16.28	75.0	370464	324.24	ng/ml	93
28)	BROMOFORM	20.24	172.8	276270	233.98	ng/ml	99
29)	*CHLOROBENZENE-D5	25.20	117.0	81589	50.00	ng/ml	94
30)	4-METHYL-2-PENTANONE	20.82	43.0	287417	218.24	ng/ml	83
31)	2-HEXANONE	22.45	43.0	182442	184.31	ng/ml	92
32)	TETRACHLOROETHENE	22.80	164.0	193570	175.95	ng/ml	95
33)	1,1,2,2-TETRACHLOROETHANE	22.68	83.0	316081	200.93	ng/ml	96
34)	TOLUENE	24.16	92.0	253425	181.14	ng/ml	96
35)	CHLOROBENZENE	25.32	112.0	357501	185.12	ng/ml	92
36)	ETHYLBENZENE	27.49	106.0	167311	185.49	ng/ml	47
37)	STYRENE	31.83	104.0	343054	189.55	ng/ml	97
	XYLENES (TOTAL)	33.23	106.0	204584	186.11	ng/ml	88
39)	TOLUENE-D8	23.96	98.0	402010	179.29	ng/ml	97
40)	BROMOFLUOROBENZENE	30.21	95.0	295411	184.04	ng/ml	92

* Compound is ISTD

006056

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 7002D Calibration Date: 12/13/87 Time: 5:02

Lab File ID: 5660 Init. Calib. Date(s): 12/ 1/87 12/ 1/87

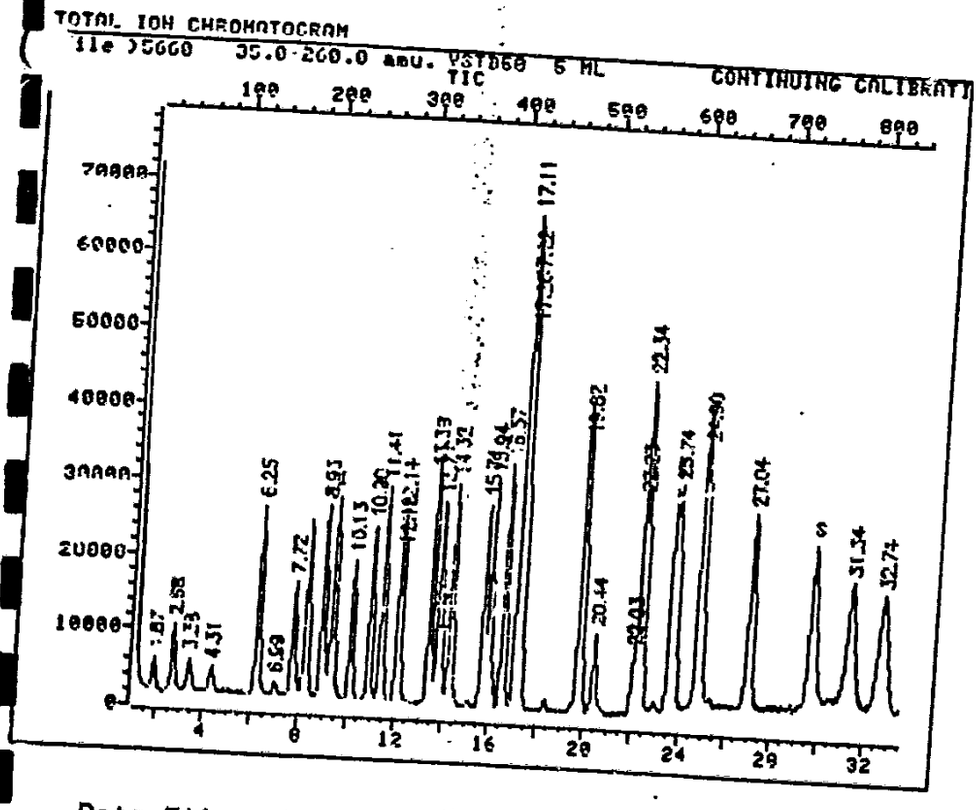
Matrix:(soil/water) WATER Level:(low/med): LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = .300 (0.250 for Bromoform) Max %D for CCC(*) is 25.0%

COMPOUND	RRF	RRF50	%D
CHLOROMETHANE #	.490	.655	33.6 #
BROMOMETHANE	.658	.767	16.6
VINYL CHLORIDE *	.700	.800	14.3 *
CHLOROETHANE	.517	.489	5.5
METHYLENE CHLORIDE	1.131	1.370	21.1
ACETONE	.307	.305	.5
CARBON DISULFIDE	3.394	3.241	4.5
1,1-DICHLOROETHENE *	1.266	1.273	.5 *
1,1-DICHLOROETHANE #	2.681	2.429	9.4 #
1,2-DICHLOROETHENE (TOTAL)	1.292	1.298	.4
CHLOROFORM *	2.873	2.845	1.0 *
1,2-DICHLOROETHANE	2.004	1.838	8.3
2-BUTANONE	.182	.151	17.0
1,1,1-TRICHLOROETHANE	.521	.565	8.4
CARBON TETRACHLORIDE	.692	.698	.8
VINYL ACETATE	.368	.218	40.8
BROMODICHLOROMETHANE	.849	.840	1.1
1,2-DICHLOROPROPANE *	.505	.449	11.1 *
TRANS-1,3-DICHLOROPROPENE	.490	.466	4.8
TRICHLOROETHENE	.495	.507	2.5
DIBROMOCHLOROMETHANE	.873	.865	.9
1,1,2-TRICHLOROETHANE	.388	.380	2.0
BENZENE	.938	.893	4.8
CIS-1,3-DICHLOROPROPENE	.582	.539	7.3
BROMOFORM #	.614	.617	.5 #
4-METHYL-2-PENTANONE	.748	.648	13.3
2-HEXANONE	.525	.442	15.9
TETRACHLOROETHENE	.583	.689	18.2
1,1,2,2-TETRACHLOROETHANE #	.880	.858	2.5 #
TOLUENE *	.747	.811	8.6 *
CHLOROBENZENE #	1.059	1.129	6.6 #
ETHYLBENZENE *	.489	.539	10.2 *
STYRENE	.990	1.113	12.4
XYLENES (TOTAL)	.597	.659	10.4
TOLUENE-D8	1.236	1.255	1.5
BROMOFLUOROBENZENE	.892	1.004	12.6
1,2-DICHLOROETHANE-D4	1.631	1.470	9.9

006057

FORM VII VOA 1/87 Rev.



Data File: >5660::L2
Name: VSTD50 5 ML
Quant Output File: ^5660::L2
Misc: CONTINUING CALIBRATION STD 1-141-3

Id File: ID_VO3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871211 00:04

Operator ID: DAVID
Quant Time: 871213 05:39
Injected at: 871213 05:02

006058

QUANT REPORT

Operator ID: DAVID
Output File: ^5660::L2
Data File: >5660::L2
Name: VSTD50 5 ML
Misc: CONTINUING CALIBRATION STD 1-141-3

Quant Rev: 6

Quant Time: 871213 05:39
Injected at: 871213 05:02
Dilution Factor: 1.00000

ID File: ID_V03::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871211 00:04

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.31	128.0	38622	50.00	ng/ml	98
2)	CHLOROMETHANE	1.87	50.0	25281	51.08	ng/ml	99
3)	BROMOMETHANE	2.68	94.0	29623	46.79	ng/ml	98
4)	VINYL CHLORIDE	3.38	62.0	30882	49.06	ng/ml	100
5)	CHLOROETHANE	4.31	64.0	18882	47.88	ng/ml	100
6)	METHYLENE CHLORIDE	6.25	84.0	52925	75.22	ng/ml	90
7)	ACETONE	6.99	43.0	11795	51.04	ng/ml	89
8)	CARBON DISULFIDE	7.72	76.0	125180	48.94	ng/ml	99
9)	1,1-DICHLOROETHENE	8.93	96.0	44243	45.01	ng/ml	95
10)	1,1-DICHLOROETHANE	10.13	63.0	93830	48.54	ng/ml	98
11)	1,2-DICHLOROETHENE (TOTAL)	10.90	96.0	50128	50.02	ng/ml	97
	CHLOROFORM	11.41	83.0	109862	50.38	ng/ml	98
	1,2-DICHLOROETHANE	12.14	62.0	71006	49.65	ng/ml	99
14)	1,2-DICHLOROETHANE-D4	12.07	65.1	56772	49.83	ng/ml	98
15)	*1,4-DIFLUOROBENZENE	19.71	114.0	124475	50.00	ng/ml	94
16)	2-BUTANONE	12.18	43.0	18814	46.65	ng/ml	88
17)	1,1,1-TRICHLOROETHANE	13.39	96.9	70305	51.56	ng/ml	93
18)	CARBON TETRACHLORIDE	13.77	117.0	86916	49.80	ng/ml	97
19)	VINYL ACETATE	13.97	43.0	27151	47.69	ng/ml	100
20)	BROMODICHLOROMETHANE	14.32	83.0	104551	50.01	ng/ml	98
21)	1,2-DICHLOROPROPANE	15.71	63.0	55832	47.43	ng/ml	99
22)	TRANS-1,3-DICHLOROPROPENE	17.26	75.0	66728	56.30	ng/ml	98
23)	TRICHLOROETHENE	16.57	130.0	63136	50.39	ng/ml	92
24)	DIBROMOCHLOROMETHANE	17.11	129.0	107661	50.37	ng/ml	97
25)	1,1,2-TRICHLOROETHANE	17.22	97.0	47352	50.20	ng/ml	95
26)	BENZENE	17.11	78.0	111152	48.61	ng/ml	99
27)	CIS-1,3-DICHLOROPROPENE	15.94	75.0	93982	68.34	ng/ml	96
28)	BROMOFORM	19.82	172.8	76774	53.72	ng/ml	99
29)	*CHLOROBENZENE-D5	24.75	117.0	88408	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	20.44	43.0	57856	48.91	ng/ml	81
31)	2-HEXANONE	22.03	43.0	39041	39.89	ng/ml	88
32)	TETRACHLOROETHENE	22.34	164.0	60883	49.69	ng/ml	96
33)	1,1,2,2-TETRACHLOROETHANE	22.23	83.0	75840	47.53	ng/ml	96
34)	TOLUENE	23.74	92.0	71719	47.93	ng/ml	97
35)	CHLOROBENZENE	24.90	112.0	99773	47.63	ng/ml	94
36)	ETHYLBENZENE	27.04	106.0	47639	50.05	ng/ml	47
	STYRENE	31.34	104.0	98411	51.60	ng/ml	95
	XYLENES (TOTAL)	32.74	106.0	58238	51.61	ng/ml	89
	TOLUENE-D8	23.55	98.0	110910	47.67	ng/ml	99
	BROMOFLUOROBENZENE	29.71	95.0	88730	51.96	ng/ml	74

Compound is ISTD

006059

035

006059

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID (Standard): 5660 Date Analyzed: 12/13/87

Instrument ID: 7002D Time Analyzed: 5:02

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	38622.	9.31	124475.	19.71	88408.	24.75
	UPPER LIMIT	77244.	9.81	248950.	20.21	176816.	25.25
	LOWER LIMIT	19311.	8.81	62238.	19.21	44204.	24.25
	EPA SAMPLE NO.						
1	VBLK	32596.	9.34	112545.	19.73	79427.	24.77
2	FD732	36627.	9.30	120168.	19.69	85531.	24.73
3	FD732MS	33310.	9.30	112518.	19.69	79168.	24.73
4	FD732MSD	34055.	9.30	111185.	19.73	76517.	24.77
5	FD733	32134.	9.30	107541.	19.73	74622.	24.77
6	FD734	33791.	9.34	110966.	19.73	80105.	24.77
7							
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19							
20							
21							
22							

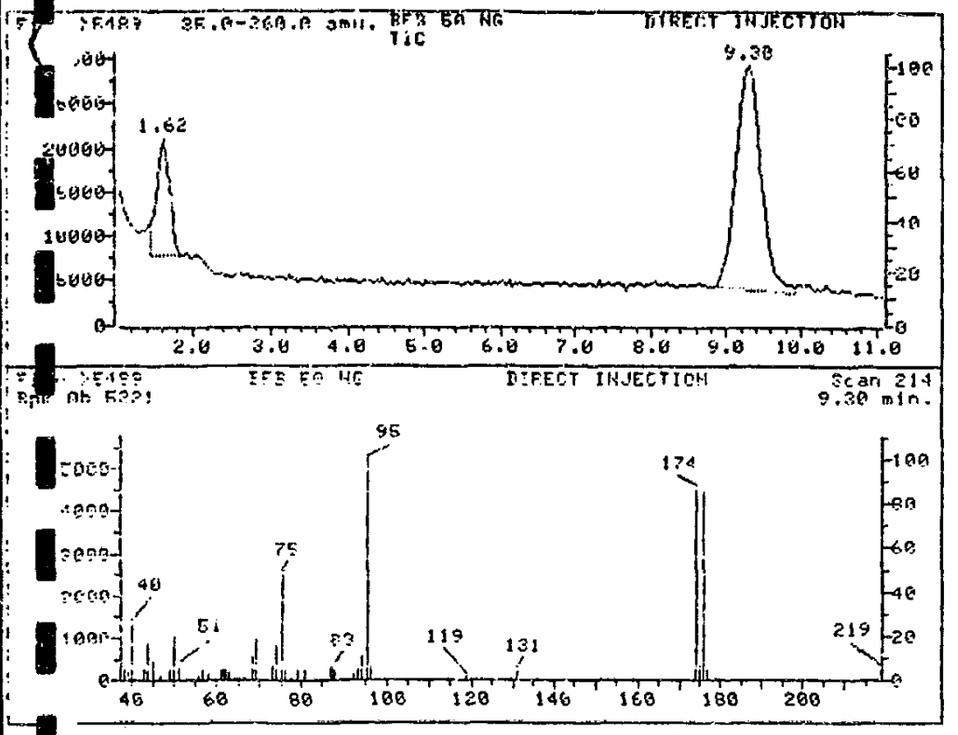
IS1 (BCM) = BROMOCHLOROMETHANE
IS2 (DFB) = 1,4-DIFLUOROBENZENE
IS3 (CBZ) = CHLOROBENZENE-D5

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

FORM VIII VOA 1/87 Rev.

006060



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
50	15-40% of mass 95	19.02	19.02	Ok
75	30-60% of mass 95	47.48	47.48	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	6.97	6.97	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	86.15	86.15	Ok
175	5-9% of mass 174	6.57	7.63	Ok
176	95-101% of mass 174	85.14	98.82	Ok
177	5-9% of mass 176	6.07	7.13	Ok

Injection Date: 12/01/87
Injection Time: 16:18
Data File: >5489
Scan: 214

006061

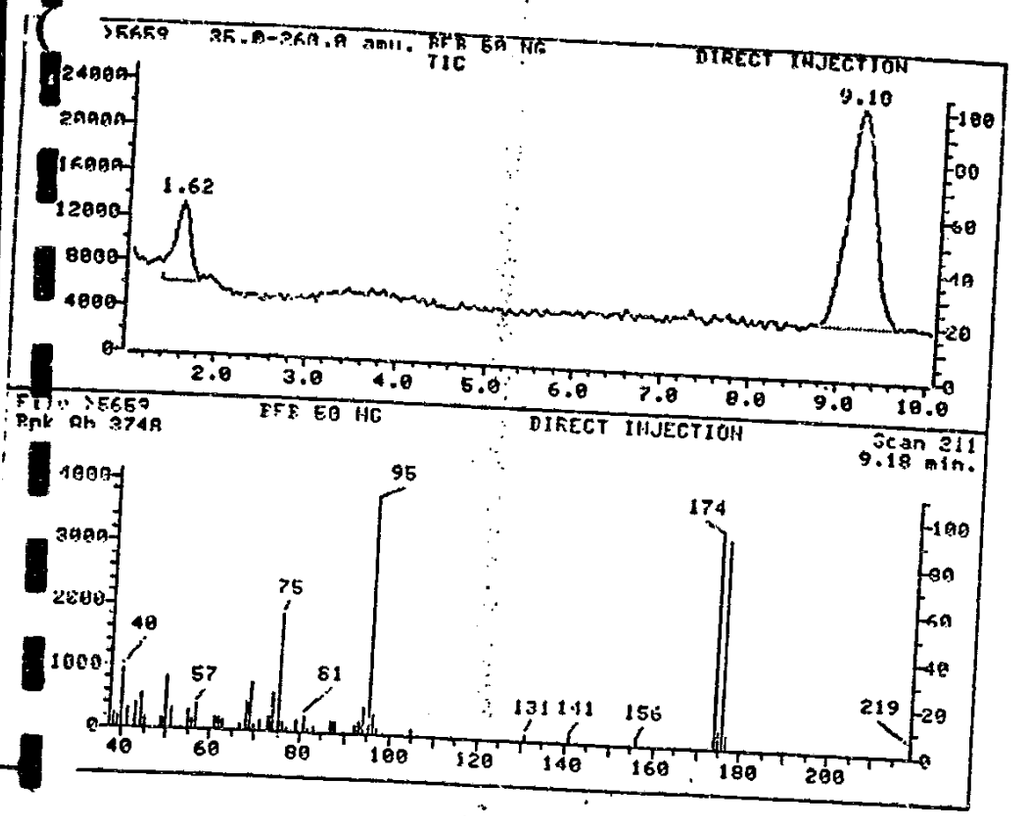
189 BFB 50 NG DIRECT INJECTION
214 NRM

File: >5489 Scan #: 214 Retn. time: 9.30

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	6.072	49.10	4.099	63.10	3.141	80.95	4.424	118.95	1.590
38.10	5.267	50.10	19.019	68.10	9.692	86.95	5.803	130.95	3.582
39.10	3.084	51.10	6.052	69.10	18.464	87.95	6.187	173.95	86.152
40.00	24.938	56.10	1.762	73.10	5.861	92.05	2.624	174.95	6.570
43.10	5.516	57.10	4.348	74.10	15.495	93.05	4.195	175.95	85.137
44.00	16.606	58.10	2.911	75.05	47.481	94.05	10.113	176.95	6.072
45.10	8.542	61.10	4.271	76.05	3.965	95.05	100.000	219.05	4.290
47.00	1.781	62.10	3.984	78.95	3.812	96.05	6.972		

006062

038



GC/MS PERFORMANCE STANDARD

Bromofluorobenzene (BFB)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
50	15-40% of mass 95	21.91	21.91	Ok
75	30-60% of mass 95	49.76	49.76	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	8.08	8.08	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	91.41	91.41	Ok
175	5-9% of mass 174	7.74	8.46	Ok
176	95-101% of mass 174	89.43	97.84	Ok
177	5-9% of mass 176	5.95	6.65	Ok

Injection Date: 12/13/87
Injection Time: 04:46
Data File: >5659
Scan: 211

006063

559
211

BFB 50 NG
NRM

DIRECT INJECTION

ile: >5659 Scan #: 211 Retn. time: 9.18

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.10	7.524	51.10	8.431	70.10	2.375	83.05	2.828	105.05	2.775
38.10	5.683	55.10	7.177	71.10	4.349	86.95	5.309	130.95	2.908
39.10	5.123	56.10	4.242	73.10	5.710	87.95	4.883	141.05	3.308
40.00	24.947	57.10	10.592	74.10	16.329	92.05	3.015	156.05	2.428
41.10	8.485	61.10	4.989	75.05	49.760	93.05	5.096	173.95	91.409
43.10	9.819	62.10	4.829	76.05	4.482	94.05	10.966	174.95	7.737
44.10	13.847	63.10	3.842	77.05	2.054	95.05	100.000	175.95	89.434
45.10	5.229	67.10	2.695	78.95	5.229	96.05	8.084	176.95	5.950
49.00	4.562	68.10	11.846	80.95	6.990	97.05	2.748	219.05	3.495
50.10	21.905	69.10	20.277	81.95	2.081				

006064

040

006064

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5661

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	30.	
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
10061-02-6	TRANS-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
10061-01-5	CIS-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	XYLENES (TOTAL)	5.	U

006065

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5661

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
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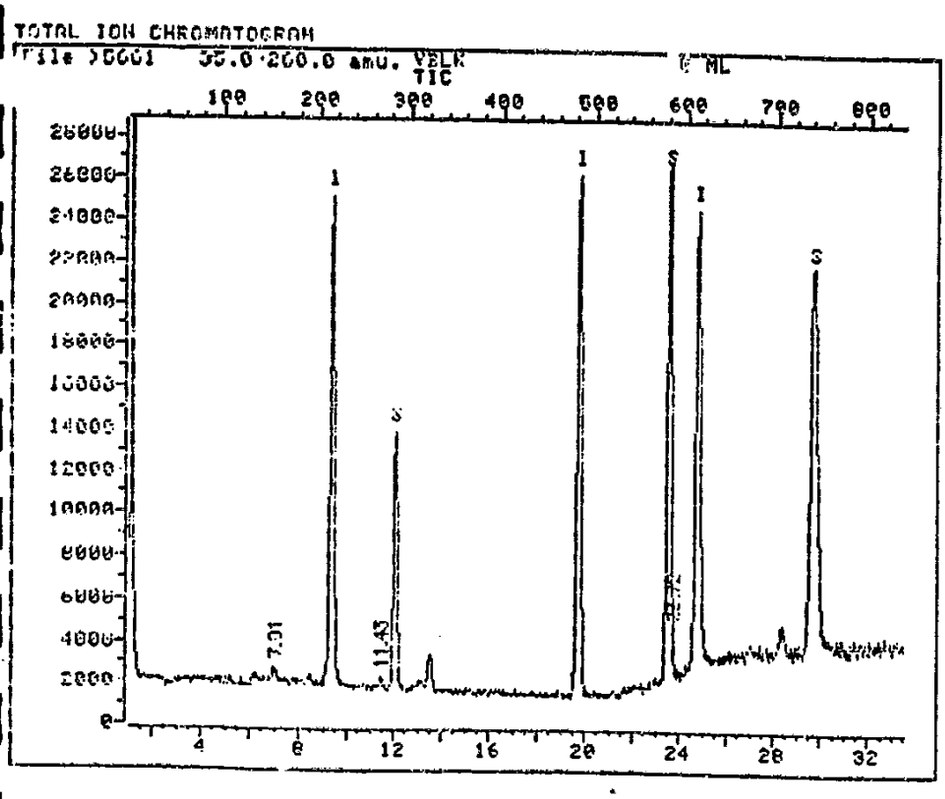
006066

FORM I VOA-TIC 1/87 Rev.



Data File: >5661::L2 Quant Output File: ^5661::L2
Name: VBLK Blank3
Misc: 5 ML

Id File: ID_V03::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

Operator ID: DAVID
Quant Time: 871213 06:15
Injected at: 871213 05:40

006067

043

QUANT REPORT

Operator ID: DAVID
Output File: ^5661::L2
Data File: >5661::L2
Name: VBLK
Misc: 5 ML

Quant Rev: 6
Quant Time: 871213 06:15
Injected at: 871213 05:40
Dilution Factor: 1.00000

ID File: ID.V03::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE	9.34	128.0	32596	50.00	ng/ml	95
2)	CHLOROMETHANE	0.00	50.0	0	0.00	ng/ml	
3)	BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4)	VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5)	CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6)	METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7)	ACETONE	7.01	43.0	5938	29.83	ng/ml	81
8)	CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9)	1,1-DICHLOROETHENE	0.00	96.0	0	0.00	ng/ml	
10)	1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11)	1,2-DICHLOROETHENE (TOTAL)	0.00	96.0	0	0.00	ng/ml	
12)	CHLOROFORM	11.43	83.0	1865	~~1.01 ng/ml~~	@	97
13)	1,2-DICHLOROETHANE	0.00	62.0	0	0.00	ng/ml	
14)	1,2-DICHLOROETHANE-D4	12.05	65.1	46238	48.25	ng/ml SS	98
15)	*1,4-DIFLUOROBENZENE	19.73	114.0	112545	50.00	ng/ml	94
16)	2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17)	1,1,1-TRICHLOROETHANE	0.00	96.9	0	0.00	ng/ml	
18)	CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19)	VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20)	BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21)	1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22)	TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23)	TRICHLOROETHENE	0.00	130.0	0	0.00	ng/ml	
24)	DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25)	1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26)	BENZENE	0.00	78.0	0	0.00	ng/ml	
27)	CIS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
28)	BROMOFORM	0.00	172.8	0	0.00	ng/ml	
29)	*CHLOROBENZENE-D5	24.77	117.0	79427	50.00	ng/ml	97
30)	4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31)	2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32)	TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33)	1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34)	TOLUENE	23.72	92.0	421	~~.33~~	ng/ml	86
35)	CHLOROBENZENE	0.00	112.0	0	0.00	ng/ml	
36)	ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37)	STYRENE	0.00	104.0	0	0.00	ng/ml	
38)	XYLENES (TOTAL)	0.00	106.0	0	0.00	ng/ml	
39)	TOLUENE-D8	23.53	98.0	99717	50.04	ng/ml SS	99
40)	BROMOFLUOROBENZENE	29.69	95.0	77239	48.45	ng/ml SS	76

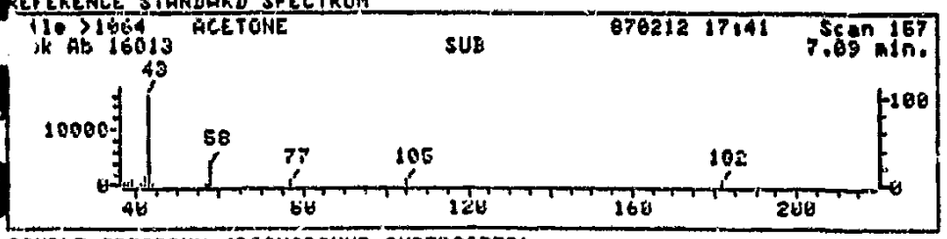
* Compound is ISTD

006068

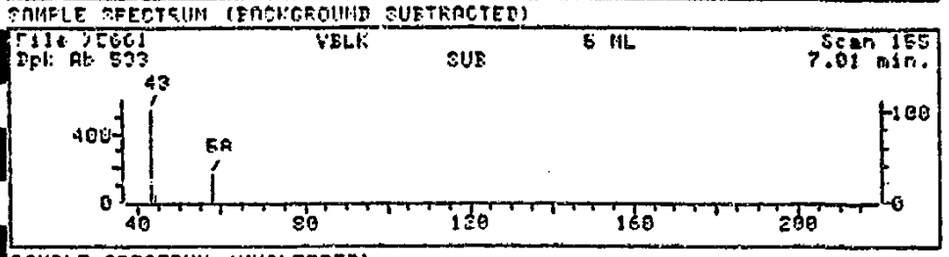
044

006068

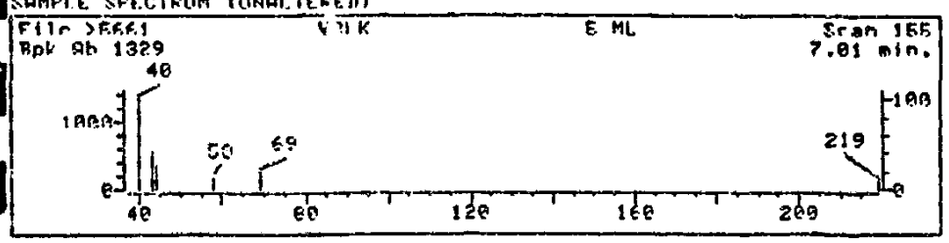
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



Data File: >5661::L2 Quant Output File: ^5661::L2
Name: VBLK
Misc: 5 ML
Quant Time: 871213 06:15 Quant ID File: ID.V03::EX
Injected at: 871213 05:40 Last Calibration: 871213 05:42

Compound No: 7
Compound Name: ACETONE
Scan Number: 155
Retention Time: 7.01 min.
Quant Ion: 43.0
Area: 5938
Concentration: 29.83 ng/ml
q-value: 81

006069

045

006069

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MS

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5669

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	46.	
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	.3	J
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
10061-02-6	TRANS-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	53.	
10061-01-5	CIS-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	51.	
108-90-7	CHLOROBENZENE	53.	
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENES (TOTAL)	5.	U

006070

FORM I VOA 1/87 Rev.

C16

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732MS

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5669

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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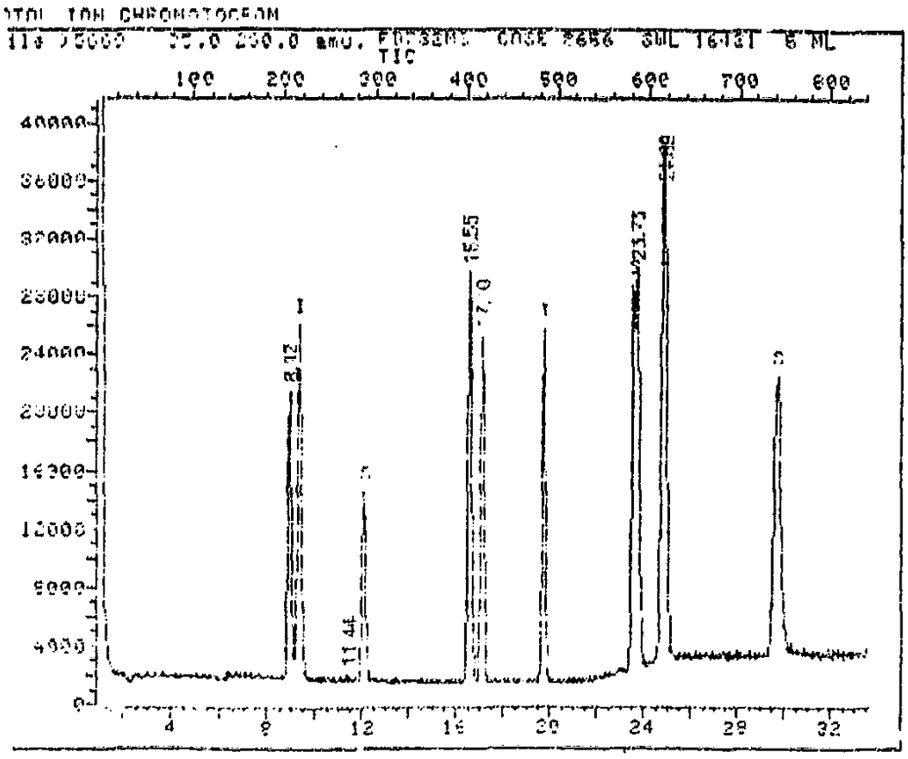
006071

FORM I VOA-TIC 1/87 Rev.



Data File: >5669::L2 Quant Output File: ^5669::L2
Name: EPA-OMS CASE 8656
Misc: SWL 16421 5 ML

Id File: ID 013::FX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 70120
Last Calibration: 871213 05:42

Operator ID: DAVID
Quant Time: 871213 11:25
Injected at: 871213 10:50

006072

QUANT REPORT

Operator ID: DAVID Quant Rev: 6 Quant Time: 871213 11:25
Output File: ^5669::L2 Injected at: 871213 10:50
Data File: >5669::L2 Dilution Factor: 1.00000
Name: FD732MS CASE 8656
Misc: SWL 16421 5 ML

ID File: ID V03::FX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 70020
Last Calibration: 871213 05:42

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1)	*BROMOCHLOROMETHANE	9.30	128.0	33310	50.00	ng/ml	94
2)	CHLOROMETHANE	0.00	50.0	0	0.00	ng/ml	
3)	BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4)	VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5)	CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6)	METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7)	ACETONE	0.00	43.0	0	0.00	ng/ml	
8)	CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9)	1,1-DICHLOROETHENE	8.92	96.0	39242	46.29	ng/ml	96
10)	1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11)	1,2-DICHLOROETHENE (TOTAL)	0.00	96.0	0	0.00	ng/ml	
12)	CHLOROFORM	11.44	83.0	507	.27	ng/ml	96
13)	1,2-DICHLOROETHANE	0.00	62.0	0	0.00	ng/ml	
14)	1,2-DICHLOROETHANE-D4	12.06	65.1	48222	49.24	ng/ml	96
15)	*1,4-DIFLUOROBENZENE	19.69	114.0	112515	50.00	ng/ml	95
16)	2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17)	1,1,1-TRICHLOROETHANE	0.00	96.9	0	0.00	ng/ml	
18)	CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19)	VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20)	BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21)	1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22)	TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23)	TRICHLOROETHENE	16.55	130.0	55530	48.65	ng/ml	91
24)	DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25)	1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26)	BENZENE	17.10	78.0	105725	52.61	ng/ml	98
27)	CIS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
28)	BROMOF3-1	0.00	172.8	0	0.00	ng/ml	
29)	*CHLOROBENZENE-D5	24.73	117.0	79168	50.00	ng/ml	99
30)	4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31)	2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32)	TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33)	1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34)	TOLUENE	23.73	92.0	65865	51.28	ng/ml	94
35)	CHLOROBENZENE	24.89	112.0	94484	52.88	ng/ml	95
36)	ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37)	STYRENE	0.00	104.0	0	0.00	ng/ml	
38)	XYLENES (TOTAL)	0.00	106.0	0	0.00	ng/ml	
39)	TOLUENE-D8	23.53	98.0	99716	50.20	ng/ml	98
40)	BROMOFLUOROBENZENE	29.70	95.0	78746	49.55	ng/ml	79

* Compound is ISTD

006073

049

006073

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MSD

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5670

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	CHLOROMETHANE	10.	U
74-83-9	BROMOMETHANE	10.	U
75-01-4	VINYL CHLORIDE	10.	U
75-00-3	CHLOROETHANE	10.	U
75-09-2	METHYLENE CHLORIDE	5.	U
67-64-1	ACETONE	10.	U
75-15-0	CARBON DISULFIDE	5.	U
75-35-4	1,1-DICHLOROETHENE	46.	
75-34-3	1,1-DICHLOROETHANE	5.	U
540-59-0	1,2-DICHLOROETHENE (TOTAL)	5.	U
67-66-3	CHLOROFORM	.6	J
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
10061-02-6	TRANS-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.	
10061-01-5	CIS-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	51.	
108-90-7	CHLOROBENZENE	53.	
100-41-4	ETHYLBENZENE	5.	U
100-42-5	STYRENE	5.	U
1330-20-7	XYLENES (TOTAL)	5.	U

006074

FORM I VOA 0507 Rev.

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732MSD

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 5. (g/mL) ML Lab File ID: 5670

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. Date Analyzed: 12/13/87

Column: (pack/cap) PACK Dilution Factor: 1.00

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.				
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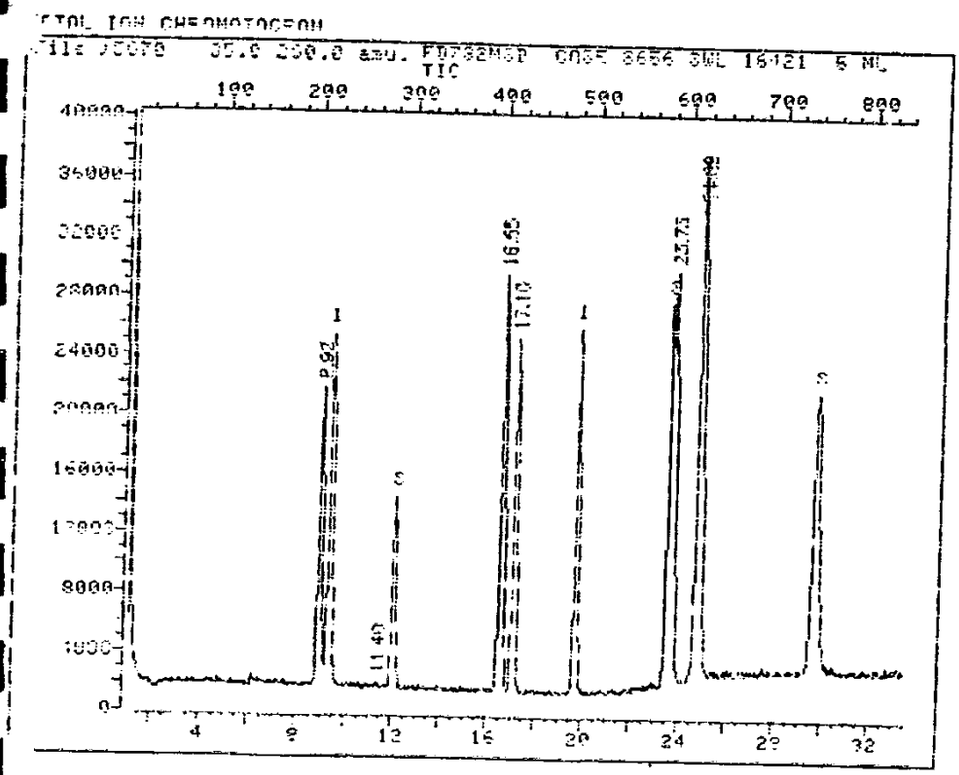
006075

FORM I VOA-TIC 1/87 Rev.



Data File: >5670::L2
Name: FD732MSD CASE 8656
Misc: SWL 16421 5 ML

Quant Output File: ^5670::L2

Id File: ID UH3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 7002D
Last Calibration: 871213 05:42

Operator ID: DAVID
Quant Time: 871213 12:03
Injected at: 871213 11:29

006076

052

006076

QUANT REPORT

Operator ID: DAVID
Output File: ^5670::L2
Data File: >5670::L2
Name: F0732MSD CASE 8656
Misc: SWL 16421 5 ML

Quant Rev: 6

Quant Time: 871213 12:03
Injected at: 871213 11:29
Dilution Factor: 1.00000

ID File: ID UM3::EX
Title: VOLATILE ORGANICS ANALYSIS (EPA 624) (5 ML SAMPLES) 70020
Last Calibration: 871213 05:42

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *BROMOCHLOROMETHANE	9.30	128.0	34055	50.00	ng/ml	96
2) CHLOROMETHANE	0.00	50.0	0	0.00	ng/ml	
3) BROMOMETHANE	0.00	94.0	0	0.00	ng/ml	
4) VINYL CHLORIDE	0.00	62.0	0	0.00	ng/ml	
5) CHLOROETHANE	0.00	64.0	0	0.00	ng/ml	
6) METHYLENE CHLORIDE	0.00	84.0	0	0.00	ng/ml	
7) ACETONE	0.00	43.0	0	0.00	ng/ml	
8) CARBON DISULFIDE	0.00	76.0	0	0.00	ng/ml	
9) 1,1-DICHLOROETHENE	8.92	96.0	40023	46.17	ng/ml	96
10) 1,1-DICHLOROETHANE	0.00	63.0	0	0.00	ng/ml	
11) 1,2-DICHLOROETHENE (TOTAL)	0.00	96.0	0	0.00	ng/ml	
12) CHLOROFORM	11.40	83.0	1204	.62	ng/ml	95
13) 1,2-DICHLOROETHANE	0.00	62.0	0	0.00	ng/ml	
) 1,2-DICHLOROETHANE-D4	12.06	65.1	49025	48.97	ng/ml	98
15) *1,4-DIFLUOROBENZENE	19.73	114.0	111185	50.00	ng/ml	93
16) 2-BUTANONE	0.00	43.0	0	0.00	ng/ml	
17) 1,1,1-TRICHLOROETHANE	0.00	96.9	0	0.00	ng/ml	
18) CARBON TETRACHLORIDE	0.00	117.0	0	0.00	ng/ml	
19) VINYL ACETATE	0.00	43.0	0	0.00	ng/ml	
20) BROMODICHLOROMETHANE	0.00	83.0	0	0.00	ng/ml	
21) 1,2-DICHLOROPROPANE	0.00	63.0	0	0.00	ng/ml	
22) TRANS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
23) TRICHLOROETHENE	16.55	130.0	54925	48.70	ng/ml	91
24) DIBROMOCHLOROMETHANE	0.00	129.0	0	0.00	ng/ml	
25) 1,1,2-TRICHLOROETHANE	0.00	97.0	0	0.00	ng/ml	
26) BENZENE	17.10	78.0	103820	52.28	ng/ml	97
27) CIS-1,3-DICHLOROPROPENE	0.00	75.0	0	0.00	ng/ml	
28) BROMOFORM	0.00	172.8	0	0.00	ng/ml	
29) *CHLOROBENZENE-D5	24.77	117.0	76517	50.00	ng/ml	97
30) 4-METHYL-2-PENTANONE	0.00	43.0	0	0.00	ng/ml	
31) 2-HEXANONE	0.00	43.0	0	0.00	ng/ml	
32) TETRACHLOROETHENE	0.00	164.0	0	0.00	ng/ml	
33) 1,1,2,2-TETRACHLOROETHANE	0.00	83.0	0	0.00	ng/ml	
34) TOLUENE	23.73	92.0	63719	51.33	ng/ml	95
35) CHLOROBENZENE	24.89	112.0	91445	52.95	ng/ml	94
36) ETHYLBENZENE	0.00	106.0	0	0.00	ng/ml	
37) STYRENE	0.00	104.0	0	0.00	ng/ml	
38) XYLENES (TOTAL)	0.00	106.0	0	0.00	ng/ml	
) TOLUENE-D8	23.53	98.0	98839	51.48	ng/ml	99
) BROMOFLUOROBENZENE	29.70	95.0	76145	49.58	ng/ml	85

* Compound is ISTD

006077

053

006077

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
1	SBLK1	69	79	90	43	53	93		0
2	FD732	67	83	86	45	54	106		0
3	FD732MS	65	78	72	40	51	88		0
4	FD732MSD	69	80	75	38	48	92		0
5	FD733	68	80	107	42	51	92		0
6	SBLK2	64	81	98	45	55	106		0
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
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22									
23									
24									
25									
26									
27									
28									
29									
30									

		QC LIMITS
S1 (NBZ)	= NITROBENZENE-D5	(35-114)
S2 (FBP)	= 2-FLUOROBIPHENYL	(43-116)
S3 (TPH)	= TERPHENYL-D14	(33-141)
S4 (PHL)	= PHENOL-D5	(10- 94)
S5 (2FP)	= 2-FLUOROPHENOL	(21-100)
S6 (TBP)	= 2,4,6-TRIBROMOPHENOL	(10-123)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II SV-1

1/85 Rev.

006078

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix Spike - EPA Sample No.: FD732

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
PHENOL	333.	0.	223.	67.	12- 89
2-CHLOROPHENOL	333.	0.	245.	74.	27-123
1,4-DICHLOROBENZENE	167.	0.	125.	75.	36- 97
N-NITROSO-DI-N-PROP.(1)	167.	0.	66.	39. *	41-116
1,2,4-TRICHLOROBENZENE	167.	0.	125.	75.	39- 98
4-CHLORO-3-METHYLPHENOL	333.	0.	169.	51.	23- 97
ACENAPHTHENE	167.	0.	128.	77.	46-118
4-NITROPHENOL	333.	5.	257.	76.	10- 80
2,4-DINITROTOLUENE	167.	0.	149.	89.	24- 96
PENTACHLOROPHENOL	333.	3.	326.	97.	9-103
PYRENE	167.	0.	152.	91.	26-127

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COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
PHENOL	333.	212.	64.	5.	42	12- 89
2-CHLOROPHENOL	333.	226.	68.	8.	40	27-123
1,4-DICHLOROBENZENE	167.	117.	70.	7.	28	36- 97
N-NITROSO-DI-N-PROP.(1)	167.	55.	33. *	19.	38	41-116
1,2,4-TRICHLOROBENZENE	167.	132.	79.	5.	28	39- 98
4-CHLORO-3-METHYLPHENOL	333.	166.	50.	2.	42	23- 97
ACENAPHTHENE	167.	122.	73.	5.	31	46-118
4-NITROPHENOL	333.	292.	86. *	13.	50	10- 80
2,4-DINITROTOLUENE	167.	154.	92.	3.	38	24- 96
PENTACHLOROPHENOL	333.	330.	98.	1.	50	9-103
PYRENE	167.	178.	107.	15.	31	26-127

(1) N-Nitroso-di-n-propylamine

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

* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 3 out of 22 outside limits

COMMENTS:

055

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: Z0173 Lab Sample ID: _____

Date Extracted: 12/14/87 Extraction:(SepF/Cont/Sonc) CONT

Date Analyzed: 1/12/88 Time Analyzed: 14:10

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

Instrument ID: 8704Z

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
1	FD732		Z0177	1/12/88
2	FD732MS		Z0178	1/12/88
3	FD732MSD		Z0179	1/12/88
4	FD733		Z0180	1/12/88
5				
6				
7				
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30				

COMMENTS:

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: Z0152 DFTPP Injection Date: 1/11/88

Instrument ID.: 8704Z DFTPP Injection Time: 9:37

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	41.3
68	Less than 2.0% of mass 69	1.1 (1.5)1
69	Mass 69 relative abundance	77.7
70	Less than 2.0% of mass 69	.3 (.4)1
127	40.0 - 60.0% of mass 198	40.1
197	Less than 1.0% of mass 198	.4
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	5.9
275	10.0 - 30.0% of mass 198	22.7
365	Greater than 1.00% of mass 198	3.3
441	Present, but less than mass 443	13.0
442	Greater than 40.0% of mass 198	69.1
443	17.0 - 23.0% of mass 442	13.9 (20.2)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
1	SSTD160		Z0153	1/11/88	10:06
2	SSTD120		Z0154	1/11/88	11:17
3	SSTD80		Z0155	1/11/88	12:11
4	SSTD50		Z0157	1/11/88	13:53
5	SSTD20		Z0163	1/11/88	21:07
6					
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22					

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5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID: Z0171 DFTPP Injection Date: 1/12/88

Instrument ID.: 8704Z DFTPP Injection Time: 11:51

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	43.8
68	Less than 2.0% of mass 69	.0 (.0)1
69	Mass 69 relative abundance	86.8
70	Less than 2.0% of mass 69	.3 (.4)1
127	40.0 - 60.0% of mass 198	44.4
197	Less than 1.0% of mass 198	.0
198	Base peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	22.0
365	Greater than 1.00% of mass 198	4.0
441	Present, but less than mass 443	15.4
442	Greater than 40.0% of mass 198	77.6
443	17.0 - 23.0% of mass 442	17.6 (22.7)2

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

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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
1	SSTD50		Z0172	1/12/88	12:54
2	SBLK1		Z0173	1/12/88	14:10
3	FD732		Z0177	1/12/88	17:46
4	FD732MS		Z0178	1/12/88	18:39
5	FD732MSD		Z0179	1/12/88	19:33
6	FD733		Z0180	1/12/88	21:22
7	SBLK2		Z0181	1/12/88	22:15
8					
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FORM V SV

1/87 053

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: Z0177

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	17.	U
111-44-4	BIS(2-CHLOROETHYL)ETHER	17.	U
95-57-8	2-CHLOROPHENOL	17.	U
541-73-1	1,3-DICHLOROBENZENE	17.	U
106-46-7	1,4-DICHLOROBENZENE	17.	U
100-51-6	BENZYL ALCOHOL	17.	U
95-50-1	1,2-DICHLOROBENZENE	17.	U
95-48-7	2-METHYLPHENOL	17.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	17.	U
106-44-5	4-METHYLPHENOL	17.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	17.	U
67-72-1	HEXACHLOROETHANE	17.	U
98-95-3	NITROBENZENE	17.	U
78-59-1	ISOPHORONE	17.	U
88-75-5	2-NITROPHENOL	17.	U
105-67-9	2,4-DIMETHYLPHENOL	17.	U
65-85-0	BENZOIC ACID	83.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	17.	U
120-83-2	2,4-DICHLOROPHENOL	17.	U
120-82-1	1,2,4-TRICHLOROBENZENE	17.	U
91-20-3	NAPHTHALENE	17.	U
106-47-8	4-CHLOROANILINE	17.	U
87-68-3	HEXACHLOROBUTADIENE	17.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	17.	U
91-57-6	2-METHYLNAPHTHALENE	17.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	17.	U
88-06-2	2,4,6-TRICHLOROPHENOL	17.	U
95-95-4	2,4,5-TRICHLOROPHENOL	17.	U
91-58-7	2-CHLORONAPHTHALENE	17.	U
88-74-4	2-NITROANILINE	83.	U
131-11-3	DIMETHYL PHTHALATE	17.	U
208-96-8	ACENAPHTHYLENE	17.	U
606-20-2	2,6-DINITROTOLUENE	17.	U

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1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 600. (g/mL) ML

Lab File ID: Z0177

Level: (low/med) LOW

Date Received: 12/10/87

% Moisture: not dec.100. dec. 0.

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-NITROANILINE	17.	U
83-32-9	ACENAPHTHENE	17.	U
51-28-5	2,4-DINITROPHENOL	83.	U
100-02-7	4-NITROPHENOL	5.	J
132-64-9	DIBENZOFURAN	17.	U
121-14-2	2,4-DINITROTOLUENE	17.	U
84-66-2	DIETHYLPHTHALATE	3.	J
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	17.	U
86-73-7	FLUORENE	17.	U
100-01-6	4-NITROANILINE	83.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	83.	U
86-30-6	N-NITROSODIPHENYLAMINE	17.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	17.	U
118-74-1	HEXACHLOROBENZENE	17.	U
87-86-5	PENTACHLOROPHENOL	3.	J
85-01-8	PHENANTHRENE	17.	U
120-12-7	ANTHRACENE	17.	U
84-74-2	DI-N-BUTYLPHTHALATE	17.	U
206-44-0	FLUORANTHENE	17.	U
129-00-0	PYRENE	17.	U
85-68-7	BUTYLBENZYLPHTHALATE	17.	U
91-94-1	3,3'-DICHLOROBENZIDINE	33.	U
56-55-3	BENZO(A)ANTHRACENE	17.	U
218-01-9	CHRYSENE	17.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	17.	U
117-84-0	DI-N-OCTYLPHTHALATE	17.	U
205-99-2	BENZO(B)FLUORANTHENE	17.	U
207-08-9	BENZO(K)FLUORANTHENE	17.	U
50-32-8	BENZO(A)PYRENE	17.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	17.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	17.	U
191-24-2	BENZO(G,H,I)PERYLENE	17.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2

1/87 Rev.

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1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix: (soil/water) WATER

Lab Sample ID: _____

Sample wt/vol: 600. (g/mL) ML

Lab File ID: Z0177

Level: (low/med) LOW

Date Received: 12/10/87

% Moisture: not dec.100. dec. 0.

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6

Dilution Factor: 1.00

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	- -	UNKNOWN	7.77	10.	J
2.	57-10-3	Hexadecanoic acid (9CI)	20.24	8.	J
3.	- -	UNKNOWN	22.95	8.	J
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
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29.					
30.					

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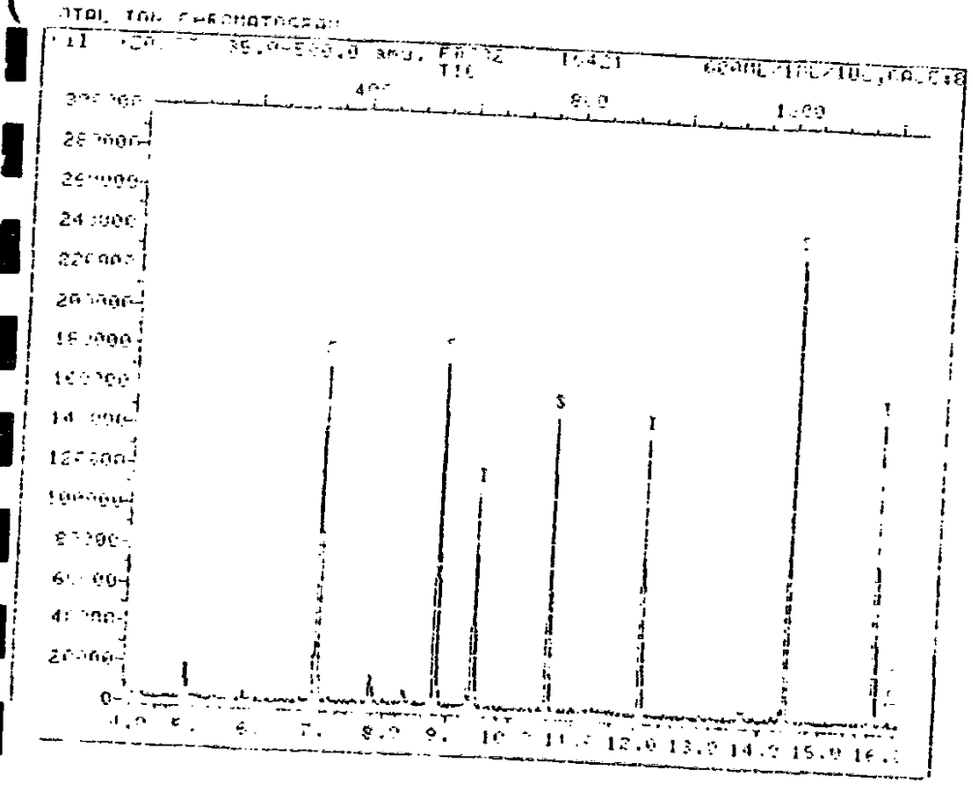
FORM I SV-TIC

1/87 Rev.

061

006085



Data File: [illegible]
Name: [illegible] 16421
Misc: 60 ML/[illegible] ML [illegible],CASE:[illegible],INST: Z

Quant Output File: [illegible]

Id File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 6[illegible]) [illegible]
Last Calibration: [illegible] 14:07

Operator ID: JOHN
Quant Time: [illegible] 1[illegible]:47
Injected at: 880112 17:46

TIC page 1 of 3

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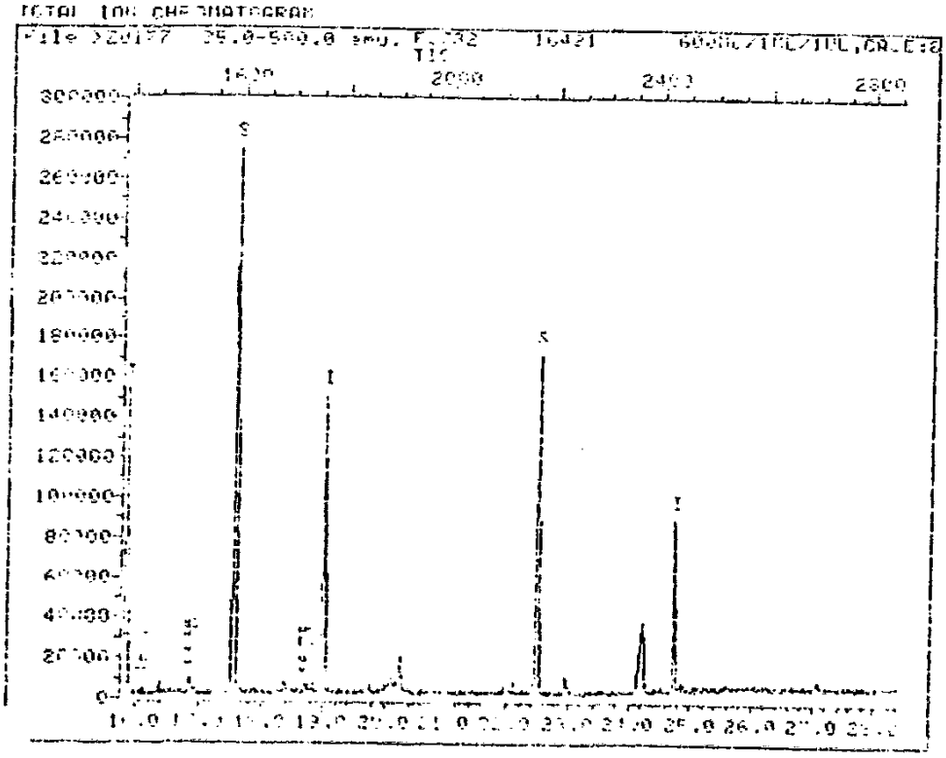
TOTAL ION CHROMATOGRAM



Data File: >20177::L1 Quant Output File: >201 7:.QT
Name: F0232 16421
Misc: 600ML/1ML/1UL,CASE:8656,INST: Z

Id File: ID_BNA::E
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) GAS
Last Calibration: 880112 14:07

Operator ID: JOHN
Quant Time: 880112 19:47
Injected at: 880112 17:46

TIC page 2 of 3

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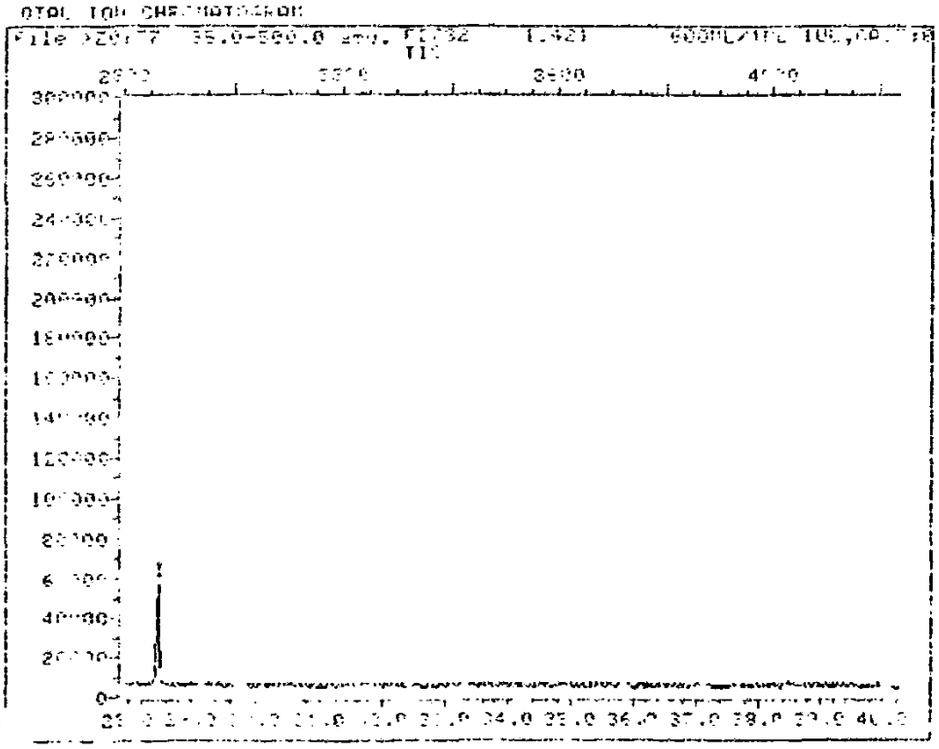
006087

OTAL ION CHROMATOGRAM



Data File: [illegible]
Name: [illegible] 1.421
Misc: 60 ML/ML 1UL,CASE:9656,INST: Z

Id File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) [illegible]
Last Calibration: 890112 14:07

Operator ID: JOHN
Quant Time: 890112 1[illegible]:4[illegible]
Injected at: 890112 17:46

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C54

QUANT REPORT

Operator ID: JOHN
Output File: ^20177::DT
Data File: ^Z0177::L1
Name: FU731 16421
Misc: 600ML/1ML/1UL,CASE:8856,INST: Z

Quant Rev: 6
Quant Time: 880112 18:47
Injected at: 8-0112 17:46
Dilution Factor: 1.00000

ID File: ID_BN2::E
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) BAS
Last Calibration: 8-0112 14:07

	Compound	R.T.	Q ion	Area	Conc	Units	Q
[illegible]	*1,4 DICHLOROBENZENE-D4	9.39	15[illegible].0	[illegible]	40.00	NG UL	96
14)	2-FLUOROPHENOL	6.89	112.0	122947	108.86	NG UL	94
15)	PHENOL-D	8.78	9[illegible].0	1[illegible]	[illegible].6[illegible]	NG UL	
[illegible])	*NAPHTHALENE-D8	12.05	136.0	121299	40.00	NG UL	96
[illegible])	NITROBENZENE-D5	10.57	8[illegible].0	[illegible]	6[illegible].5	NG UL	[illegible]
31)	*ACENAPHTHENE-D10	15.85	164.0	[illegible]	40.00	NG UL	95
[illegible])	4-NITROPHENOL	1[illegible].10	10[illegible].0	[illegible]	2.[illegible]5	NG UL	[illegible]
[illegible])	DIETHYLPHTHALATE	16.38	149.0	62[illegible]	2.[illegible]6	NG UL	95
50)	2-FLUOROBIPHENYL	14.41	172.0	1[illegible]	8[illegible].5[illegible]	NG UL	[illegible]
51)	2,4,6-TRIBROMOPHENOL	17.55	329.[illegible]	[illegible]	211.57	NG UL	96
[illegible]	*PHENOL-D10	19.00	18[illegible].0	1[illegible]	40.00	NG UL	[illegible]
[illegible])	PENTACHLOROPHENOL	18.73	266.0	[illegible]	1.[illegible]9	NG UL	97
6[illegible])	*CHRYSENE-D[illegible]	24.72	240.0	[illegible]	40.00	NG UL	[illegible]
[illegible])	TERPHENYL-D14	22.48	244.0	[illegible]	85.56	NG UL	97
[illegible])	*PERYLENE-D[illegible]	2[illegible].4[illegible]	2[illegible]4.0	[illegible]	40.00	NG UL	[illegible]

Compound is [illegible]TD

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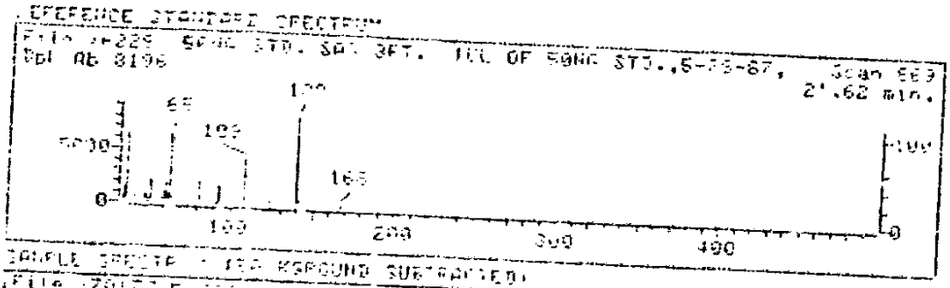
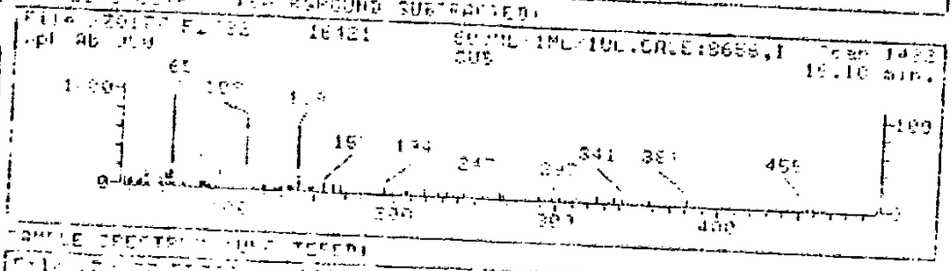
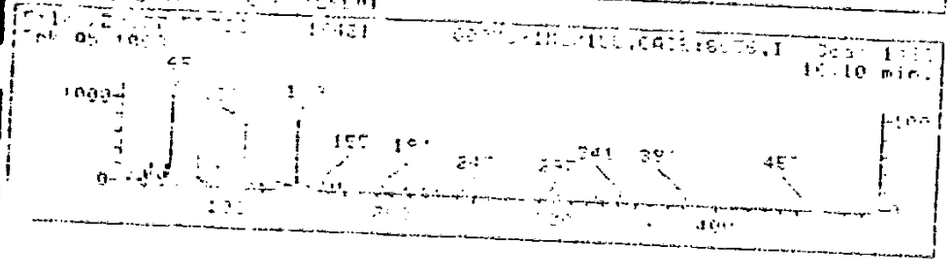






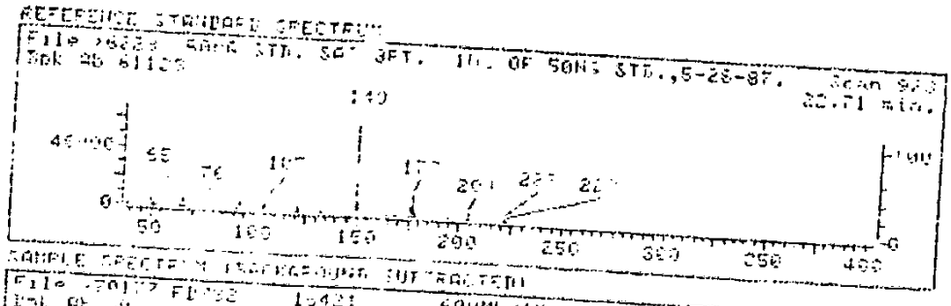
Data File: [illegible]
Name: [illegible] 16421
Misc: 60 ML/1ML/1UL,CASE:9656,INST: 2
Quant Time: [illegible] 18:47
Injected at: [illegible] 17:46

Quant Output File: 20177::QT
Quant ID File: ID_BN[illegible]
Last Calibration: [illegible] 14:0

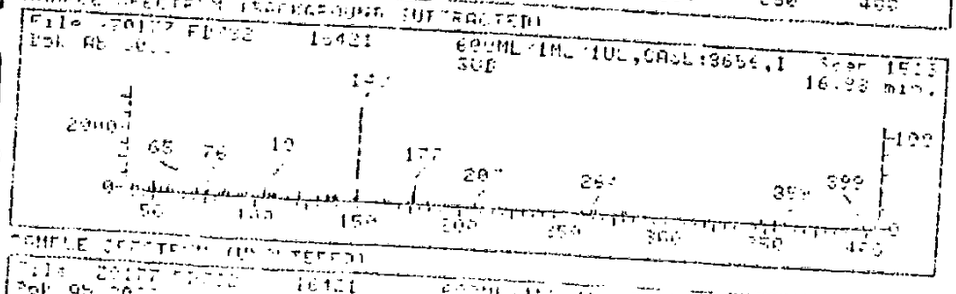
Compound No: [illegible]
Compound Name: 4-NITROSHEDOL
Scan Number: 1422
Retention Time: 16.10 min.
Quant Ion: [illegible]
Area: 1161
Concentration: 2.85 NG/UL
q-value: 94

006090

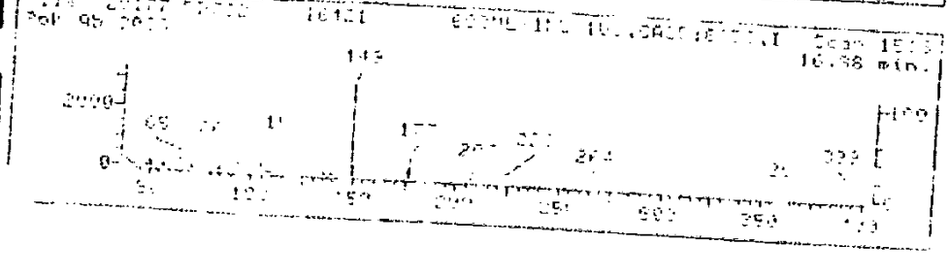
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNSUBTRACTED)

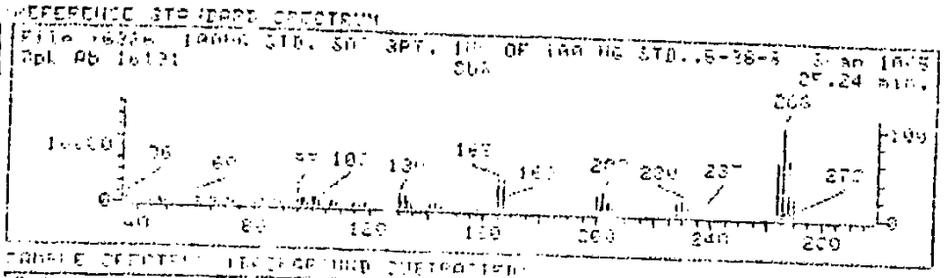


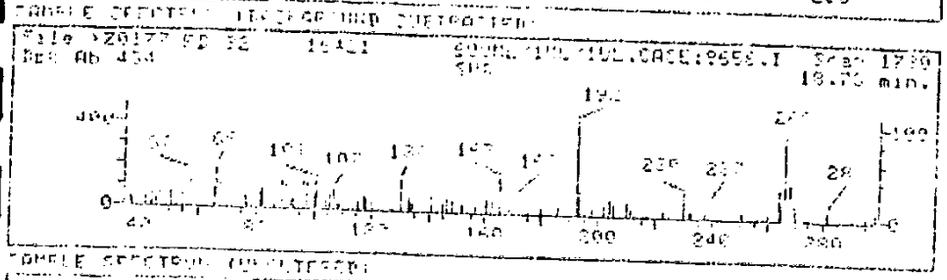
Data File: >20177::L1
Name: FD732 16421
Misc: 60 ML/1ML/1UL,CASE:3656,INST: 2
Quant Time: 9-01-2 15:47
Injected at: 880112 17:46

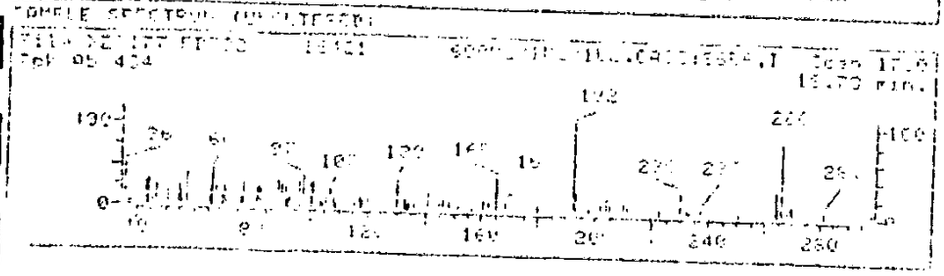
Quant Output File: 201 7::QT
Quant IO File: IO_BNP::6
Last Calibration: 880112 14:07

Compound No: 45
Compound Name: DIETHYLPHTHALATE
Scan Number: 1513
Retention Time: 16.98 min.
Quant Ion: 149.0
Area: 6248
Concentration: 2.06 NG UL
q-value: 95

006091







Data File: [illegible]
Name: [illegible]
Misc: 60[illegible]ML/1ML/1UL,CASE:[illegible],INST: Z
Quant Time: 980112 18:47
Injected at: 980112 17:45

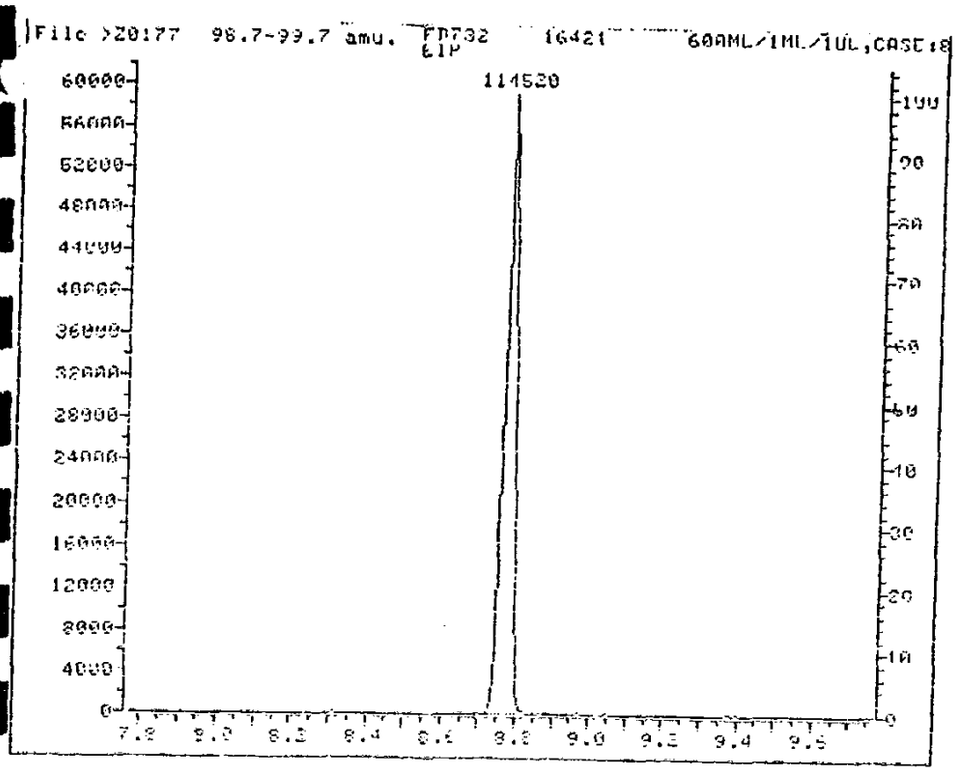
Quant Output File: 201[illegible]::QT
Quant ID File: ID_BN[illegible]::E[illegible]
Last Calibration: 980112 14:07

Compound No: [illegible]
Compound Name: PENTACHLOROPHENOL
Scan Number: 1729
Retention Time: 18.73 min.
Quant Ion: [illegible].0
Area: [illegible]
Concentration: 1.79 NG UL
q-value: 93

006092

068

006092



Data File: >Z0177::L1 Quant Output File: >Z0177::U1
Name: FD732 16421
Misc: 60AML/1ML/1UL,CASE:8656,DIST: 2
Quant Time: 880112 19:47 Quant ID File: ID_BN2::EX
Injected at: 880112 17:46 Last Calibration: 880112 13:07

Compound No: 15
Compound Name: PHENOL-D5
Scan Number: 564
Retention Time: 8.78 min.
Quant Ion: 99.9
Area: 1145200
Concentration: 89.62 NG/UL

This report was produced by WARTA on: 880112 19:00

006093

069

006093

[illegible] data file made from : [illegible]

Sample: [illegible] 1-401 Operator: JOHN [illegible] J 12 [illegible] 1[illegible]46
Misc : 60[illegible]ML ML UL,C[illegible]E:[illegible],[illegible]ST: Z
Sys. #: 4 [illegible] model: [illegible] S[illegible]HU rev.: [illegible] ALS # : [illegible]
Method file: [illegible] Tuning file: [illegible]TU[illegible]E No. of extra scans : 2
Source temp.: [illegible] Analyzer temp.: 0 Transfer line temp. : 0

Chromatograph oven temperatures : 0. 0. 0. 0. 0.
Chromatograph oven times, min. : 0.0 0.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 0.0 0.0 0.0 0.0 0.0

[illegible] [illegible] 1[illegible]401 [illegible]UL/1[illegible]/1[illegible],C[illegible]E:[illegible]: 2
[illegible] 01 [illegible]0.0 LP [illegible]
Integrator: [illegible] Area Project: [illegible]144. Max Peaks: [illegible] Baseline [illegible] 1
Dilution: 0.[illegible] Results File [illegible] Sorted by Time Area [illegible]

Peak #	R.T. min.	First scan	max. scan	last scan	peak height	raw area	corr. area	corr. % area	Total Conc.
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	1[illegible]960	46894	37002	[illegible]	[illegible]
3	20.24	[illegible]	1[illegible]6	1[illegible]11	16[illegible]3	[illegible]6[illegible]6	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sum of corrected areas: [illegible]49[illegible].

Summary of Unknowns [illegible] Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	40.0	21[illegible]4.	9.[illegible]	[illegible]. 2
2	40.0	2[illegible]15[illegible].	11.0[illegible]	1[illegible].72 - 1[illegible].9[illegible]
3	40.0	2[illegible]4521.	15.[illegible]	13.[illegible] - 17.42
4	40.0	2[illegible]23[illegible].	1[illegible].0[illegible]	17.42 - 21.8[illegible]
5	40.0	181443.	24.[illegible]	21.[illegible]6 - 26.59
6	40.0	1[illegible]70[illegible].	26.46	2[illegible].5[illegible] - 4[illegible].2[illegible]

Dilution Factor (DF) = 1.00 Fractional solids Fact = 1.00
Amount Injected (AMI) = 1[illegible]00.00 Amount Used (AU) = 1[illegible]0.0

Correction Factor = 1.00 = (AMI / AU) / (DF * FS)

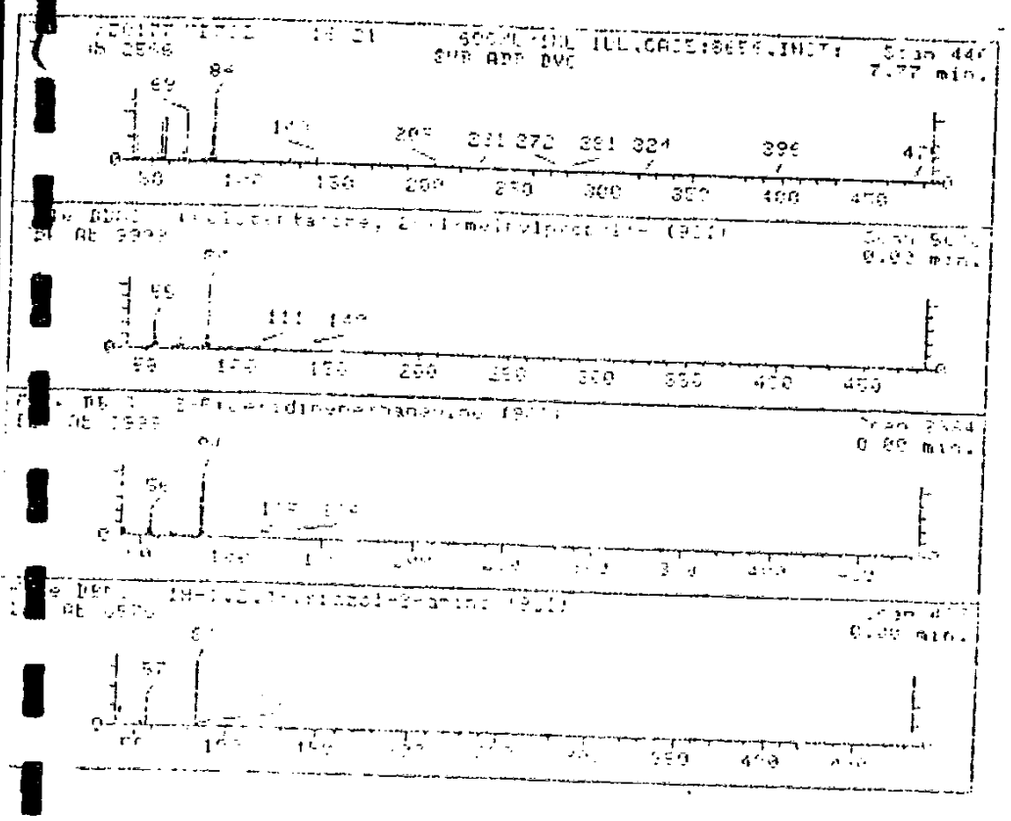
Unknown Concentration = $\frac{\text{Conc Int Std}}{\text{Area Int Std}}$ * Area Unk * Correction Factor

9:40 PM TUE., 12 [illegible], 1[illegible]98

006094

C70

006094



Unknown #

Area = 37002.00 Tentative Concentration is 7.00

1. Cyclopentanone, 2-(1-methylpropyl)- (9CI)
2. 2-Piperidinenethanamine (9CI)
3. 1H-1,2,4-Triazol-3-amine (9CI)
4. 1-Pentan-3-one (9CI)(9CI)
5. 1H-Imidazole, 4,5-dihydro-2-methyl- (9CI)
6. 1H-Pyrazole, 4,5-dihydro-3-methyl- (9CI)
7. 2-Butenal, 2-methyl-, (E)- (9CI)

140 C8H16O
114 C6H14N2
84 C4H4N4
84 C5H8O
84 C4H6N2
84 C4H8N2
84 C5H8O

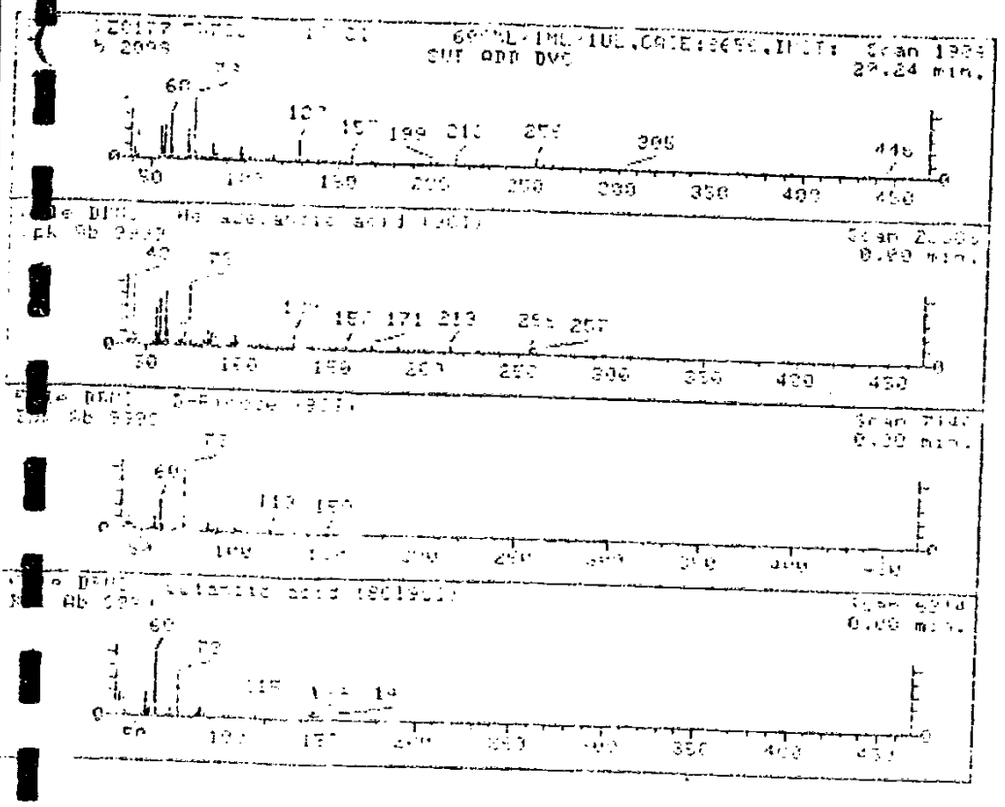
Sample file: 20177 Spectrum #: 446
Search speed: 1 Tilting option: N No. of ion ranges searched: 4

Prob.	CAS #	CON #	POOT	K.	DK	#FLG	T.LT	%	LON	C_I	R_IV
41*	6376927	5763	DBMS	26	64	2	0	100	26	17	14
38*	22990778	5715	DBMS	34	60	2	0	80	27	14	15
37*	61925	5650	DBMS	22	63	1	0	100	27	14	14
36*	1629 99	5671	DBMS	22	62	2	0	550	27	14	13
35*	534769	5656	DBMS	24	45	3	0	272	27	14	[illegible]
34*	1911704	5660	DBMS	22	72	3	0	118	27	14	[illegible]
11*	497030	5665	DBMS	28	65	2	0	54	[illegible]	2	

071

006095

006095



Unknown #
Area = 74676.00 Tentative Concentration is 5.00

1. Hexadecanoic acid (9CI)
2. D-Ribose (9CI)
3. Octanoic acid (8CI9CI)
4. Pentanoic acid (9CI)
5. Nonanoic acid (8CI9CI)

[illegible]

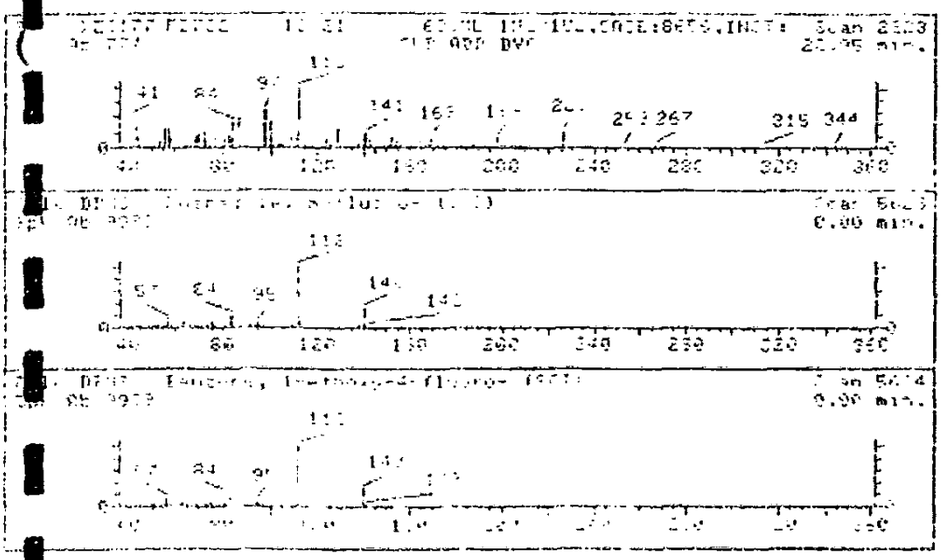
Sample file: [illegible] Spectrum #: 1986
Search speed: 1 Tilting option: N No. of ion ranges searched: [illegible]

Prob.	CAS #	CON #	PUOT	K	DK	#FIG	T.CT	%	CON	[illegible]	R_IV
[illegible]	57103	2072	DBMS	30	[illegible]	3	0	[illegible]	[illegible]	10	[illegible]
25*	50691	2024	DBMS	29	[illegible]	3	0	[illegible]	[illegible]	[illegible]	13
[illegible]	[illegible]	2019	DBMS	[illegible]	[illegible]	2	0	[illegible]	[illegible]	5	14
20*	[illegible]	1976	DBMS	[illegible]	[illegible]	2	0	[illegible]	[illegible]	[illegible]	14
[illegible]	[illegible]	2026	DBMS	[illegible]	[illegible]	2	0	[illegible]	[illegible]	3	14

006096

072

006096



006097

Unknown

Area = [illegible] Tentative Concentration is 5.00

1. Phenetole, m-fluoro- ([illegible])
2. Benzene, 1-ethoxy-4-fluoro- ([illegible])

Sample file: [illegible] Spectrum #: [illegible]
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

Prob.	[illegible] #	CL #	PLOT	[illegible]	[illegible]	# LG	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	11*	[illegible]	12[illegible]1	DBMS	[illegible]	0	[illegible]	0	[illegible]	[illegible]	14
[illegible]	11*	[illegible]	12032	DBMS	24	[illegible]	[illegible]	0	[illegible]	[illegible]	14

073

006097

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD733

ab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1120. (g/mL) ML Lab File ID: Z0180

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	9.	U
111-44-4	BIS(2-CHLOROETHYL)ETHER	9.	U
95-57-8	2-CHLOROPHENOL	9.	U
541-73-1	1,3-DICHLOROBENZENE	9.	U
106-46-7	1,4-DICHLOROBENZENE	9.	U
100-51-6	BENZYL ALCOHOL	9.	U
95-50-1	1,2-DICHLOROBENZENE	9.	U
95-48-7	2-METHYLPHENOL	9.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	9.	U
106-44-5	4-METHYLPHENOL	9.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	9.	U
67-72-1	HEXACHLOROETHANE	9.	U
98-95-3	NITROBENZENE	9.	U
78-59-1	ISOPHORONE	9.	U
88-75-5	2-NITROPHENOL	9.	U
105-67-9	2,4-DIMETHYLPHENOL	9.	U
65-85-0	BENZOIC ACID	45.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	9.	U
120-83-2	2,4-DICHLOROPHENOL	9.	U
120-82-1	1,2,4-TRICHLOROBENZENE	9.	U
91-20-3	NAPHTHALENE	9.	U
106-47-8	4-CHLOROANILINE	9.	U
87-68-3	HEXACHLOROBUTADIENE	9.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	9.	U
91-57-6	2-METHYLNAPHTHALENE	9.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	9.	U
88-06-2	2,4,6-TRICHLOROPHENOL	9.	U
95-95-4	2,4,5-TRICHLOROPHENOL	9.	U
91-58-7	2-CHLORONAPHTHALENE	9.	U
88-74-4	2-NITROANILINE	45.	U
131-11-3	DIMETHYL PHTHALATE	9.	U
208-96-8	ACENAPHTHYLENE	9.	U
606-20-2	2,6-DINITROTOLUENE	9.	U

006098

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD733

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1120. (g/mL) ML Lab File ID: Z0180

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	0
99-09-2	3-NITROANILINE	9.	U
83-32-9	ACENAPHTHENE	9.	U
51-28-5	2,4-DINITROPHENOL	45.	U
100-02-7	4-NITROPHENOL	45.	U
132-64-9	DIBENZOFURAN	9.	U
121-14-2	2,4-DINITROTOLUENE	9.	U
84-66-2	DIETHYLPHTHALATE	9.	U
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	9.	U
86-73-7	FLUORENE	9.	U
100-01-6	4-NITROANILINE	45.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	45.	U
86-30-6	N-NITROSODIPHENYLAMINE	9.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	9.	U
118-74-1	HEXACHLOROBENZENE	9.	U
87-86-5	PENTACHLOROPHENOL	45.	U
85-01-8	PHENANTHRENE	9.	U
120-12-7	ANTHRACENE	9.	U
84-74-2	DI-N-BUTYLPHTHALATE	9.	U
206-44-0	FLUORANTHENE	9.	U
129-00-0	PYRENE	9.	U
85-68-7	BUTYLBENZYLPHTHALATE	9.	U
91-94-1	3,3'-DICHLOROBENZIDINE	18.	U
56-55-3	BENZO(A)ANTHRACENE	9.	U
218-01-9	CHRYSENE	9.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	9.	U
117-84-0	DI-N-OCTYLPHTHALATE	9.	U
205-99-2	BENZO(B)FLUORANTHENE	9.	U
207-08-9	BENZO(K)FLUORANTHENE	9.	U
50-32-8	BENZO(A)PYRENE	9.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	9.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	9.	U
191-24-2	BENZO(G,H,I)PERYLENE	9.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

006099

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD733

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt./vol: 1120. (g/mL) ML Lab File ID: Z0180

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec. 100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	13.69	3.	J
2. - -	UNKNOWN	13.89	5.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
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21.				
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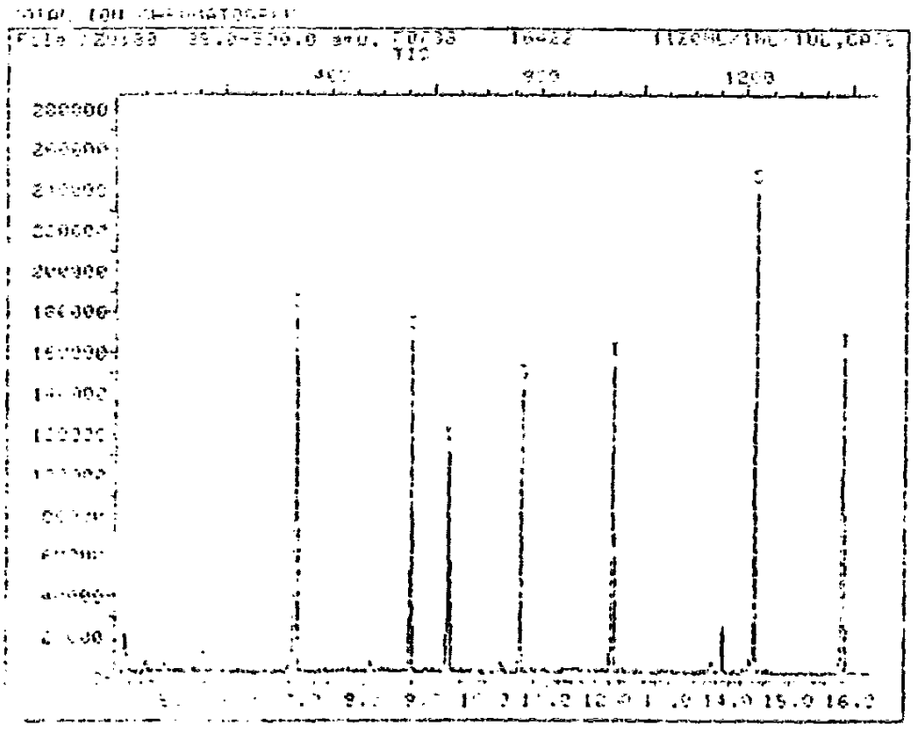
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

006100

FORM I SV-TIC 1/87 Rev.



Data File: [illegible] 80:[illegible] Quant Output File: [illegible]
Name: [illegible] 16422
Misc: 11[illegible] [illegible] 1UL,[illegible] [illegible],[illegible]: 2

[illegible] File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 6[illegible]) GAS
Last Calibration: 9[illegible] 1[illegible]:0[illegible]

Operator ID: [illegible]
Quant Time: [illegible]
Injected at: [illegible] 21:22

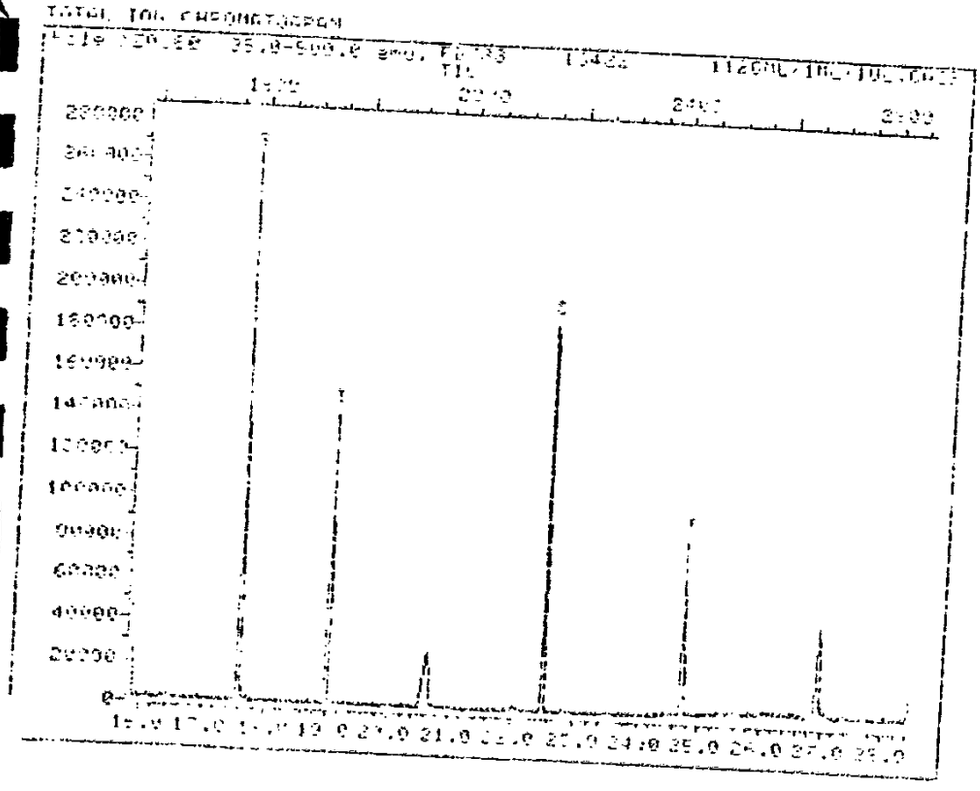
TIC page 1 of [illegible]

006101

077

006101

TOTAL ION CHROMATOGRAM



Data File: [illegible]
Name: [illegible]
Misc: 112 ML/1ML/1UL,[illegible] 8656,INST: Z

Quant Output File: [illegible]

Id File: [illegible]
Title: [illegible] (EPA 625) [illegible]
Last Calibration: [illegible] 14:07

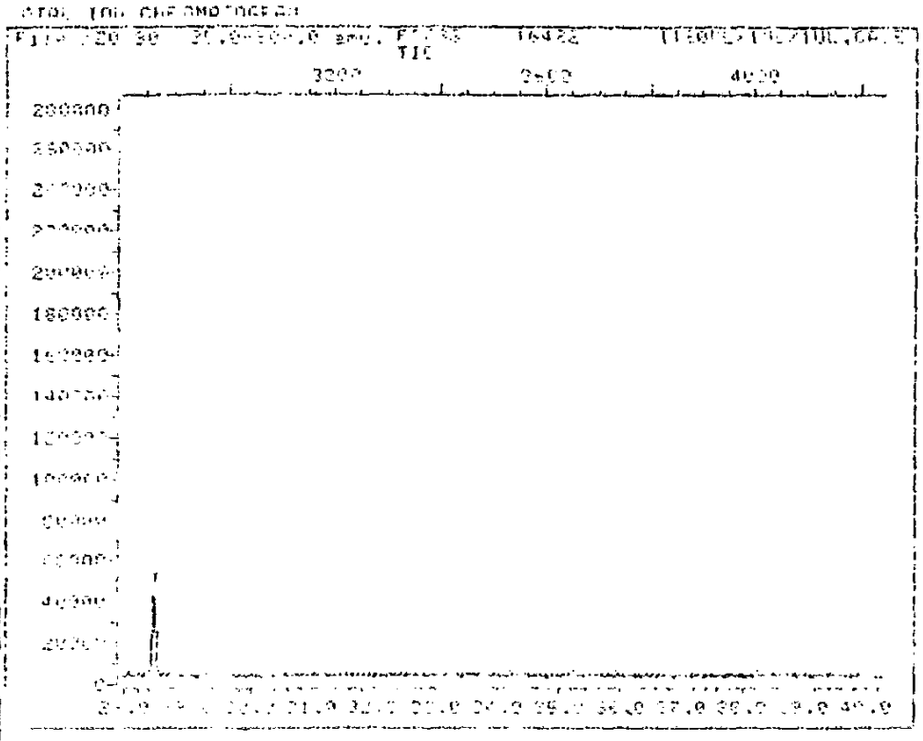
Operator ID: [illegible]
Quant Time: [illegible]
Injected at: 990112 21:22

TIC page 2 of 3

006102

078

006102



Data File: [illegible] Quant Output File: [illegible]
Name: [illegible]
Misc: [illegible]

Id File: [illegible]
Title: [illegible]
Last Calibration: [illegible]

Operator ID: JOHN
Quant Time: [illegible]
Injected at: 980112 21:22

TIC page 3 of 3

006103

QUANT REPORT

Operator ID: [illegible] Quant Rev: 6 Quant Time: 880112 22:03
Output File: [illegible] Injected at: [illegible]
Data File: [illegible] Dilution Factor: 1.00000
Name: [illegible]
Misc: 1120ML/1ML/1UL,CASE 9676,INST: Z

[illegible] File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: [illegible]

	Compound	R.T.	Q ion	Area	Conc	Units	[illegible]
[illegible]	*1,4-DICHLOROBENZENE-D4	9.37	150.0	[illegible]	40.0[illegible]	NG/UL	[illegible]
[illegible]	2-FLUOROPHENOL	6.86	112.0	[illegible]	102.[illegible]	NG/UL	[illegible]
[illegible]	PHENOL-D6	8.76	99.0	[illegible]	8[illegible]	NG/UL	[illegible]
16)	*NAPHTHALENE-D8	12.05	136.0	[illegible]	40.00	NG/UL	[illegible]
[illegible]	NITROBENZENE-D	1[illegible].56	8[illegible].0	[illegible]	6[illegible].31	NG/UL	[illegible]
[illegible]	*ACENAPHTHENE-D10	15.94	164.0	[illegible]	40.00	NG/UL	[illegible]
[illegible]	2-FLUOROBIPHENYL	14.42	172.0	[illegible]	[illegible]	NG/UL	[illegible]
[illegible]	2,4,6-TRIBROMOPHENOL	17.54	[illegible]	[illegible]	144.54	NG/UL	[illegible]
[illegible]	*PHENANTHRENE-D10	1[illegible].00	18[illegible].0	[illegible]	40.[illegible]	NG/UL	[illegible]
32)	*CHRYSENE-D12	24.73	240.0	[illegible]	40.[illegible]	NG/UL	[illegible]
[illegible]	TERPHENYL-D14	2[illegible].4[illegible]	2[illegible].0	[illegible]	1[illegible].60	NG/UL	[illegible]
[illegible]	*PERYLENE-D12	29.46	264.0	[illegible]	40.[illegible]	NG/UL	[illegible]

* Compound is IS [illegible]

006104

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006104

[illegible] Results File Header from : [illegible]

Sample: FL [illegible] Operator: JOHN MS
Misc : 112UL,[illegible]UL,CASE [illegible],INST: 2 [illegible] 12-86 21:2[illegible]
Sys. #: 4 MS model: [illegible] GC model: 1A ACS # : [illegible]
Method file: [illegible] Tuning file: [illegible] No. of extra reports: 2
Source temp.: [illegible] Analyzer temp.: 0 Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

[illegible] Prep. [illegible]
35.01 500.0 [illegible] [illegible] 11:00 [illegible],CASE [illegible],INST: 2
Unitope: [illegible] Area Project: 14654. Max Peaks: 2 Bunching: 1
Dr Unitope: 0.00 Results File [illegible] Sorted by Time/Area [illegible]

Peak	R.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	13.99	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	26.93	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Sum of corrected areas: [illegible]

Summary of Unknowns -SM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Wind w	
1	[illegible]	21[illegible]68.	9.[illegible]	4.[illegible]2 -	10.[illegible]1
2	[illegible]	2[illegible].	1[illegible].0[illegible]	10.[illegible]1 -	1[illegible]
3	[illegible]	296[illegible].	15.84	13.94 -	17.42
4	[illegible]	26[illegible].	1[illegible].0[illegible]	17.42 -	2[illegible].8[illegible]
5	[illegible]	165615.	24.[illegible]	21.36 -	26.59
6	[illegible]	146545.	2[illegible].4[illegible]	26.59 -	4[illegible].2[illegible]

Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 1[illegible]00.00 Amount Used (AU) = 1[illegible]00.0[illegible]

Correction Factor = 1.00 = (AM / AU) / (DF * FS)

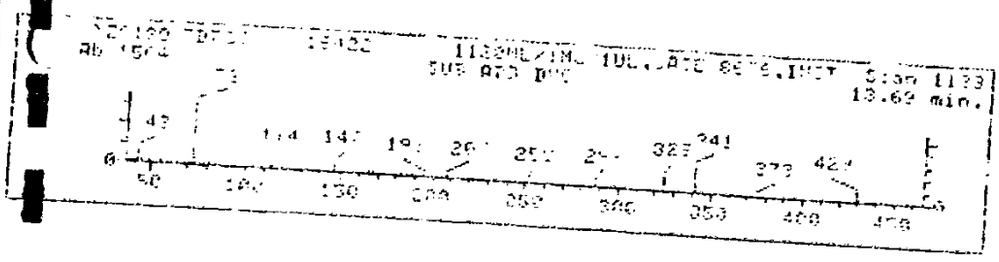
Unknown Concentration = $\frac{\text{Conc Int Std}}{\text{Area Int Std}}$ * Area Unk * Correction Factor

10:18 PM TUE., 12 JAN., 1988

081

006105

006105



Unknown /a

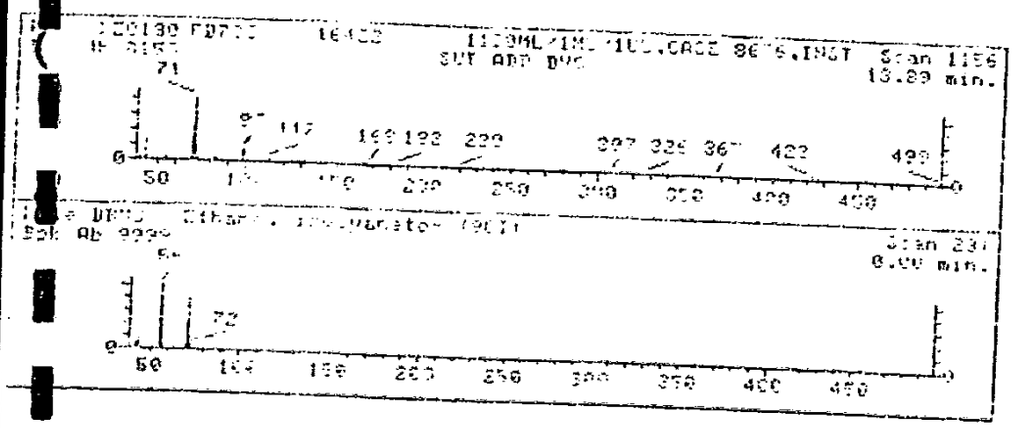
Area = [illegible] Tentative Concentration is 7.00

Sample File: [illegible] Spectrum #: 1.75

No data base entries were retrieved.

006106

082



006107

Unknown /c

Unknown [illegible]
Area = 42379.[illegible] Tentative Concentration is 6.00

1. Ethanol, [illegible] (PCI)

[illegible]

Sample file: [illegible] Spectrum #: 1156
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	COM #	PUOT	[illegible]	DK	#FLS	TILT	%	CON	C_I	[illegible]
1.	24[illegible]	[illegible]	[illegible]	DRMS	2[illegible]	[illegible]	3	0	1[illegible]	44	8	1[illegible]

083

006107

6B
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 8704Z Calibration Date(s): 1/11/88 1/11/88

Min $\overline{RRF}$ for SPCC(#) = .050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = Z0163 RRF50 = Z0157
RRF80 = Z0155 RRF120= Z0154 RRF160= Z0153

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
PHENOL *	2.390	1.883	1.648	1.557	1.550	1.763	18.9*
BIS(2-CHLOROETHYL)ETHER	2.746	1.897	1.749	1.716	1.707	1.921	21.4
2-CHLOROPHENOL	1.672	1.559	1.363	1.378	1.393	1.493	13.3
1,3-DICHLOROBENZENE	1.825	1.466	1.346	1.288	1.269	1.410	15.3
1,4-DICHLOROBENZENE *	1.782	1.494	1.324	1.274	1.204	1.380	16.2*
BENZYL ALCOHOL	1.154	.995	.903	.906	.900	.960	10.7
1,2-DICHLOROBENZENE	1.779	1.474	1.346	1.288	1.269	1.404	14.2
2-METHYLPHENOL	1.549	1.377	1.219	1.200	1.207	1.293	11.0
BIS(2-CHLOROISOPROPYL)ETHER	2.716	2.355	2.205	2.204	2.097	2.279	10.3
4-METHYLPHENOL	1.568	1.433	1.233	1.240	1.014	1.250	17.7
N-NITROSO-DI-N-PROPYLAMINE #	1.564	1.352	1.268	1.279	1.238	1.323	9.5#
HEXACHLOROETHANE	.911	.850	.756	.726	.687	.769	12.0
NITROBENZENE	.671	.539	.505	.474	.444	.513	16.8
ISOPHORONE	1.204	.973	.935	.897	.880	.962	12.9
2-NITROPHENOL *	.265	.235	.221	.210	.206	.224	10.3*
2,4-DIMETHYLPHENOL	.491	.409	.393	.378	.362	.399	12.2
BENZOIC ACID		.204	.205	.201	.189	.198	4.0
BIS(2-CHLOROETHOXY)METHANE	.774	.607	.566	.541	.523	.589	16.3
2,4-DICHLOROPHENOL *	.374	.306	.292	.276	.271	.298	13.3*
1,2,4-TRICHLOROBENZENE	.381	.324	.296	.275	.267	.302	14.8
NAPHTHALENE	1.386	1.119	1.006	.907	.853	1.021	20.2
4-CHLOROANILINE	.468	.426	.376	.359	.338	.384	13.7
HEXACHLOROBUTADIENE *	.248	.208	.192	.178	.163	.192	17.0*
4-CHLORO-3-METHYLPHENOL *	.494	.387	.365	.345	.342	.379	15.6*
2-METHYLNAPHTHALENE	.726	.631	.558	.489	.469	.557	18.7
HEXACHLOROCYCLOPENTADIENE #	.437	.387	.375	.347	.344	.372	9.8#
2,4,6-TRICHLOROPHENOL *	.563	.461	.439	.468	.523	.496	9.5*
2,4,5-TRICHLOROPHENOL	.592	.500	.455	.379	.316	.426	25.8
2-CHLORONAPHTHALENE	1.386	1.219	1.063	.971	.953	1.091	16.2
2-NITROANILINE		.712	.668	.605	.637	.652	6.2
DIMETHYL PHTHALATE	1.774	1.523	1.385	1.247	.884	1.283	27.7
ACENAPHTHYLENE	2.445	2.038	1.768	1.571	1.538	1.816	20.0
2,6-DINITROTOLUENE	.458	.387	.341	.305	.456	.401	16.7
3-NITROANILINE		.452	.447	.408	.413	.427	4.9
ACENAPHTHENE *	1.580	1.304	1.133	1.008	.994	1.169	20.1*
2,4-DINITROPHENOL #		.183	.197	.193	.193	.192	2.7#
4-NITROPHENOL #		.240	.238	.187	.187	.208	13.8#

006108

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 8704Z Calibration Date(s): 1/11/88 1/11/88

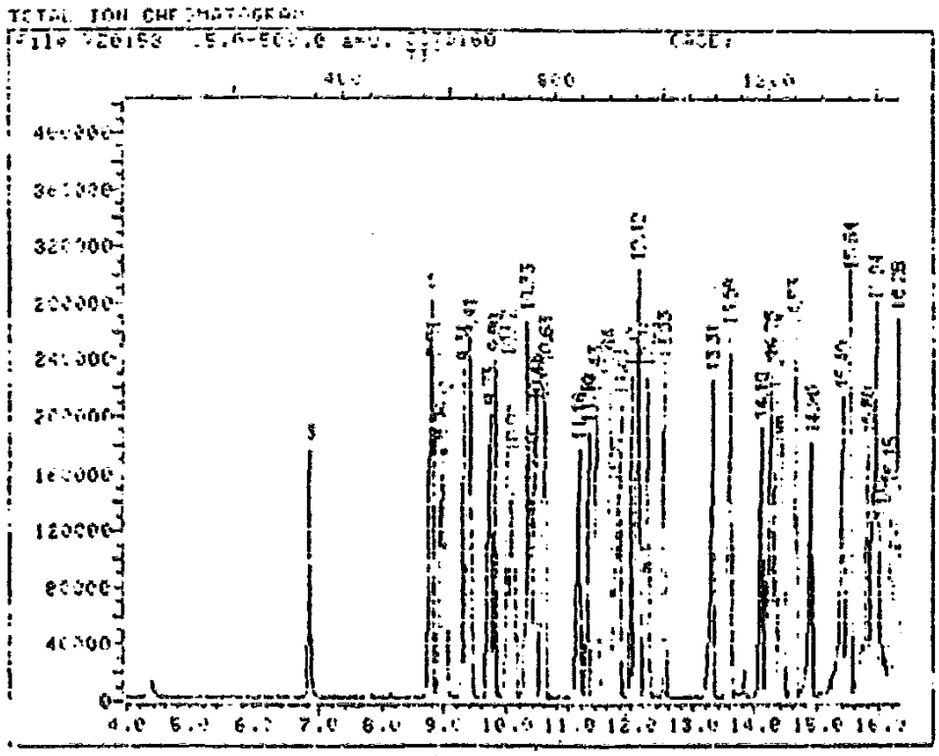
Min $\overline{RRF}$ for SPCC(#) = .050 Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = Z0163 RRF50 = Z0157
RRF80 = Z0155 RRF120= Z0154 RRF160= Z0153

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	$\overline{RRF}$	% RSD
DIBENZOFURAN	2.055	1.768	1.555	1.416	1.389	1.595	16.8
2,4-DINITROTOLUENE	.618	.518	.487	.384	.368	.457	22.3
DIETHYLPHTHALATE	2.135	1.812	1.722	1.269	1.551	1.673	17.5
4-CHLOROPHENYL-PHENYLETHER		.628	.534	.458	.454	.505	15.2
FLUORENE	1.445	1.164	.995	.867	.847	1.028	23.2
4-NITROANILINE	.470	.411	.348	.275	.262	.338	25.9
4,6-DINITRO-2-METHYLPHENOL	.170	.185	.183	.156	.213	.187	12.4
N-NITROSODIPHENYLAMINE *	.699	.610	.559	.602	.659	.631	8.0*
4-BROMOPHENYL-PHENYLETHER	.336	.287	.269	.295	.249	.281	11.8
HEXACHLOROBENZENE	.444	.392	.374	.403	.410	.405	5.8
PENTACHLOROPHENOL *	.196	.186	.149	.194	.259	.207	21.0*
PHENANTHRENE	1.304	1.116	1.064	1.060	1.072	1.115	8.5
ANTHRACENE	1.330	1.107	.941	.953	.886	1.017	17.0
DI-N-BUTYLPHTHALATE	2.236	1.864	1.538	1.610	1.609	1.744	15.2
FLUORANTHENE *	1.292	1.134	.933	.937	.959	1.036	14.2*
PYRENE	1.871	1.468	1.346	1.350	1.186	1.401	18.2
BUTYLBENZYLPHTHALATE	1.185	1.046	.940	.928	.858	.969	13.0
3,3'-DICHLOROBENZIDINE	.507	.418	.376	.344	.334	.385	17.6
BENZO(A)ANTHRACENE	1.605	1.280	1.267	1.121	1.118	1.252	15.1
CHRYSENE	1.496	1.280	1.267	1.121	1.119	1.234	12.1
BIS(2-ETHYLHEXYL)PHTHALATE	1.654	1.412	1.436	1.340	1.305	1.409	9.4
DI-N-OCTYLPHTHALATE *	2.324	2.302	2.188	2.228	2.107	2.209	4.2*
BENZO(B)FLUORANTHENE	1.360	1.221	1.101	1.136	1.037	1.149	10.8
BENZO(K)FLUORANTHENE	1.133	1.060	.998	.985	.842	.976	12.0
BENZO(A)PYRENE *	1.201	1.050	.997	1.002	.834	.986	14.1*
INDENO(1,2,3-CD)PYRENE	1.336	1.301	1.086	1.072	.827	1.075	20.5
DIBENZ(A,H)ANTHRACENE	1.113	.917	.825	.787	.655	.825	21.0
BENZO(G,H,I)PERYLENE	1.223	1.012	.847	.840	.631	.864	26.4
NITROBENZENE-D5	.413	.438	.560	.490	.440	.463	11.6
2-FLUOROBIPHENYL	1.261	1.211	1.372	1.200	1.128	1.217	7.6
TERPHENYL-D14	.913	.873	1.077	1.037	.891	.947	9.2
PHENOL-D5	1.332	1.398	1.564	1.446	1.303	1.391	7.3
2-FLUOROPHENOL	1.250	1.193	1.443	1.377	1.326	1.319	6.7
2,4,6-TRIBROMOPHENOL	.299	.270	.378	.299	.238	.287	18.2

(1) Cannot be separated from Diphenylamine

TOTAL ION CHROMATOGRAM



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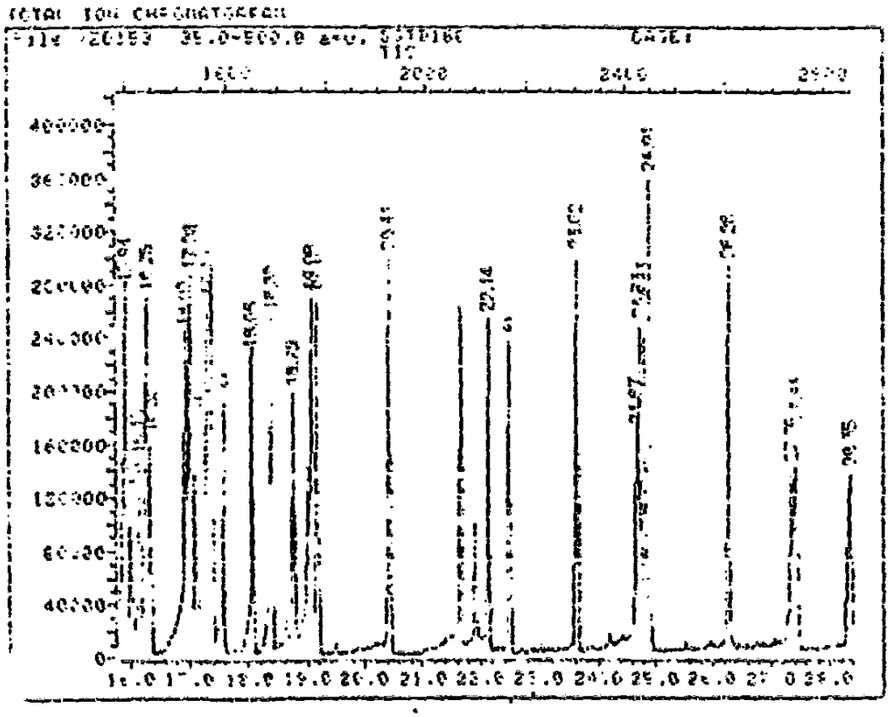
Name: SYSTD160
Misc: CASE: INST:Z INIT CAL.

Id File: ID_EN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 15:08

Operator ID: JOHN
Quant Time: 880111 15:09
Injected at: 880111 10:06

TIC page 1 of 3

006110



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Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 6.[illegible])
Last Calibration: 880111 15:08

Operator ID: JSKN
Quant Time: 880111 15:09
Injected at: 880111 10:06

TIC page 2 of 3

006111

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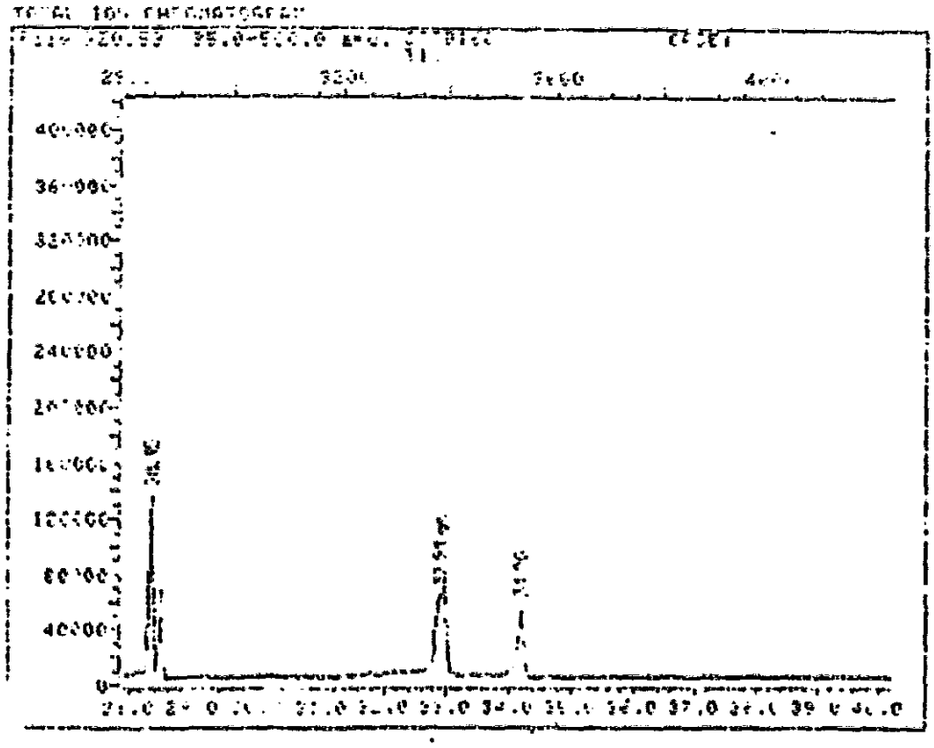
006111



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Quant Output File: [illegible]

Id File: ID_[illegible]
Title: [illegible]
Last Calibration: 880111 15:08

Operator ID: [illegible]
Quant Time: 880111 15:09
Injected at: [illegible]

TIC page 3 of 3

006112

QUANT REPORT

Operator ID: JOHN
Output File: ^Z0157::CT
Data File: >Z0153::03
Name: SSTD150
Misc: CASE:

Quant Rev: 6 Quant Time: 880111 15:09
Injected at: 880111 11.06
Dilution Factor: 1.00000

INST:2 INIT CAL.

ID File: ID_PH2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SHS
Last Calibration: 880111 15:08

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*1,4-DICHLOROBENZENE-D4	9.38	152.0	27799	40.00	NG/UL	84
2)	PHENOL	8.81	94.0	172367M	131.74	NG/UL	78
3)	BIS(2-CHLOROETHYL)ETHER	9.94	93.0	169834	142.18	NG/UL	
4)	2-CHLOROPHENOL	9.02	128.0	154968	142.98	NG/UL	83
5)	1,3-DICHLOROBENZENE	9.31	146.0	141077	138.43	NG/UL	93
6)	1,4-DICHLOROBENZENE	9.41	146.0	173818	128.93	NG/UL	94
7)	BENZYL ALCOHOL	9.72	108.0	190116	144.77	NG/UL	93
8)	1,2-DICHLOROBENZENE	9.80	146.0	124334M	131.23	NG/UL	95
9)	2-METHYLPHENOL	10.02	108.0	154221	140.30	NG/UL	98
10)	BIS(2-CHLOROISOPROPYL)ETHER	10.08	45.0	233172	142.46	NG/UL	81
11)	4-METHYLPHENOL	10.37	108.0	137773	113.24	NG/UL	93
12)	N-NITROSO DI-N-PROPYLAMINE	10.40	70.0	137568M	146.30	NG/UL	
13)	HEXACHLOROETHANE	10.46	117.0	763581	128.94	NG/UL	
14)	2-FLUOROPHENOL	6.84	112.0	147397M	177.04	NG/UL	
15)	PHENOL-D6	8.79	99.0	1448720	148.24	NG/UL	
16)	*NAPHTHALENE-D8	12.06	136.0	107687	40.00	NG/UL	97
17)	NITROBENZENE	10.63	77.0	1639971	171.21	NG/UL	
18)	ISOPHORONE	11.16	82.0	765110	144.76	NG/UL	89
19)	2-NITROPHENOL	11.30	139.0	85429M	179.76	NG/UL	
20)	2,4-DIMETHYLPHENOL	11.43	107.0	150167	141.63	NG/UL	85
21)	BENZOIC ACID	11.77	122.0	784761	147.01	NG/UL	91
22)	BIS(2-CHLOROETHOXY)METHANE	11.64	93.0	216719	137.78	NG/UL	96
23)	2,4-DICHLOROPHENOL	11.81	162.0	1238[illegible]	141.67	NG/UL	92
24)	1,2,4-TRICHLOROBENZENE	12.00	180.0	110671	131.69	NG/UL	87
25)	NAPHTHALENE	12.12	128.0	3[illegible]36[illegible]	121.92	NG/UL	97
26)	4-CHLOROANILINE	12.26	127.0	140037	126.86	NG/UL	87
27)	HEXACHLOROBUTADIENE	12.53	225.0	67624	125.41	NG/UL	99
28)	4-CHLORO-3-METHYLPHENOL	13.31	107.0	141710	141.30	NG/UL	89
29)	2-METHYLNAPHTHALENE	13.59	142.0	194519	116.98	NG/UL	91
30)	NITROBENZENE-D5	10.59	82.0	182496	160.90	NG/UL	82
31)	*ACENAPHTHENE-D10	15.87	164.0	52586	40.00	NG/UL	95
32)	HEXACHLOROCYCLOPENTADIENE	14.10	237.0	72307	142.15	NG/UL	95
33)	2,4,6-TRICHLOROPHENOL	14.25	196.0	110080	179.11	NG/UL	98
34)	2,4,5-TRICHLOROPHENOL	14.32	196.0	663739M	100.93	NG/UL	97
35)	2-CHLORONAPHTHALENE	14.63	162.0	200507	125.07	NG/UL	95
36)	2-NITROANILINE	14.90	65.0	133938M	143.44	NG/UL	
37)	DIMETHYL PHTHALATE	15.40	163.0	185863	92.82	NG/UL	81
38)	ACENAPHTHYLENE	15.54	152.0	323484	120.71	NG/UL	96
39)	2,6-DINITROTOLUENE	16.35	165.0	95956M	188.97	NG/UL	
40)	3-NITROANILINE	15.80	138.0	86914M	146.40	NG/UL	
41)	ACENAPHTHENE	15.94	153.0	219053	121.94	NG/UL	93
42)	2,4-DINITROPHENOL	16.02	184.0	406[illegible]M	168.84	NG/UL	
43)	4-NITROPHENOL	16.15	109.0	[illegible]	[illegible]	NG/UL	

006113

	Compound	R.T.	Q ion	Area	Conc	Units	Q
44)	DIBENZOFURAN	16.28	168.0	292295	125.75	NG/UL	86
45)	2,4-DINITROTOLUENE	16.35	165.0	77317	113.56	NG/UL	82
46)	DIETHYLPHTHALATE	16.92	149.0	326250M	136.94	NG/UL	92
47)	4-CHLOROPHENYL-PHENYLETHER	17.04	204.0	99472	119.57	NG/UL	87
48)	FLUORENE	17.02	166.0	178168	116.43	NG/UL	95
49)	4-NITROANILINE	17.13	138.0	55200	102.17	NG/UL	91
50)	2-FLUOROBIPHENYL	14.43	172.0	237230	148.96	NG/UL	99
51)	2,4,6-TRIBROMOPHENOL	17.57	329.7	59061	141.23	NG/UL	9[illegible]
52)	*PHENANTHRENE-D10	19.92	188.0	60980	40.00	NG/UL	81
53)	4,6-DINITRO-2-METHYLPHENOL	17.24	198.0	52045M	183.26	NG/UL	
54)	N-NITROSODIPHENYLAMINE	17.30	169.0	1608577M	173.04	NG/UL	93
55)	4-BROMOPHENYL-PHENYLETHER	18.06	248.0	60637	138.48	NG/UL	84
56)	HEXACHLOROBENZENE	18.39	284.0	99889	167.13	NG/UL	87
57)	PENTACHLOROPHENOL	18.75	266.0	63087M	222.56	NG/UL	97
58)	PHENANTHRENE	19.08	178.0	261572	153.78	NG/UL	96
59)	ANTHRACENE	19.18	178.0	216222M	129.25	NG/UL	96
60)	DI-N-BUTYLPHTHALATE	20.41	149.0	392960	138.14	NG/UL	86
61)	FLUORANTHENE	22.14	202.0	273869	170.93	NG/UL	87
62)	*CHRYSENE-D12	24.76	240.0	49289	40.00	NG/UL	97
63)	PYRENE	22.14	202.0	273869	129.24	NG/UL	93
64)	BUTYLBENZYLPHTHALATE	23.62	149.0	169159	171.22	NG/UL	79
65)	3,3'-DICHLOROBENZIDINE	24.67	252.0	65764	127.79	NG/UL	99
66)	BENZO(A)ANTHRACENE	24.73	228.0	220409	139.71	NG/UL	93
67)	CHRYSENE	24.87	228.0	198891	132.27	NG/UL	89
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.91	149.0	257304	147.90	NG/UL	81
69)	TRIPHENYL-D14	22.59	244.0	1[illegible]57[illegible]	163.49	NG/UL	99
70)	*PERYLENE-D12	28.51	264.0	49251	40.00	NG/UL	96
71)	DI-N-OCTYLPHTHALATE	25.28	149.0	4[illegible]4989	146.06	NG/UL	100
72)	BENZO(B)FLUORANTHENE	27.36	252.0	204196	135.78	NG/UL	94
73)	BENZO(K)FLUORANTHENE	27.45	252.0	1[illegible]878[illegible]	126.54	NG/UL	[illegible]
74)	BENZO(A)PYRENE	28.35	252.0	164718	127.14	NG/UL	95
75)	INDENO(1,2,3-CD)PYRENE	32.91	276.0	1[illegible]301[illegible]M	101.42	NG/UL	91
76)	DIBENZ(A,H)ANTHRACENE	32.99	278.0	1[illegible]9034M	106.33	NG/UL	91
77)	BENZO(G,H,I)PERYLENE	34.20	276.0	1[illegible]428[illegible]	97.13	NG/UL	92

* Compound is ISTD

006114

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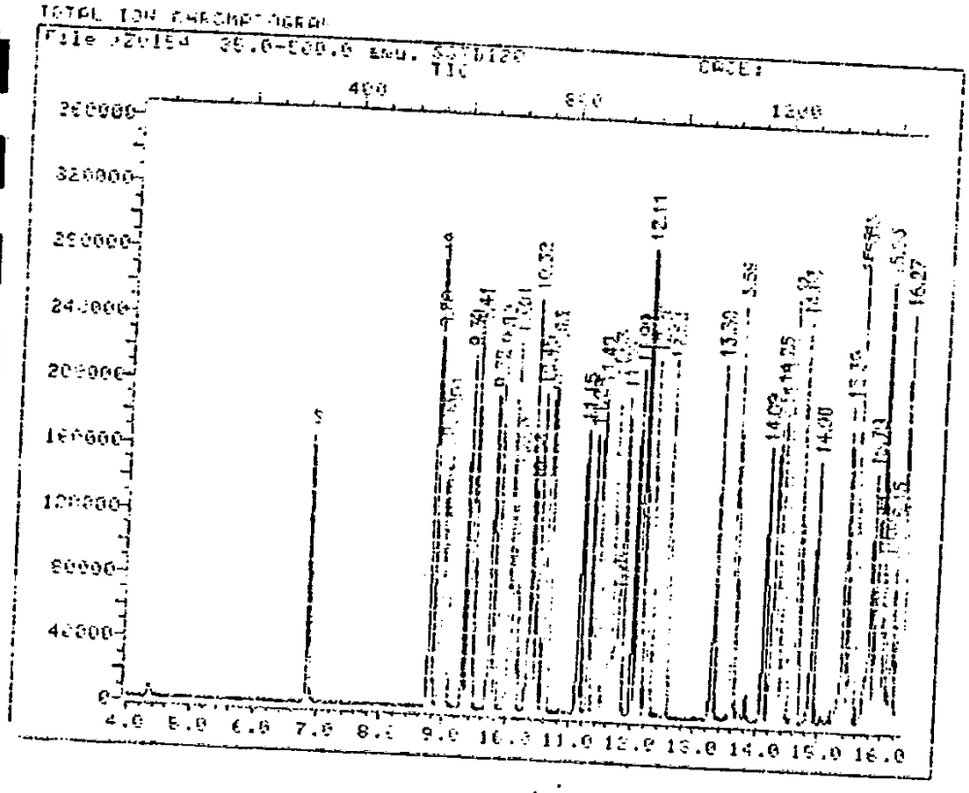
006114



Data File: >Z0154::03
Name: SSTD120
Misc: CASE:

Quant Output File: ^Z0154::07

INST:Z INIT CAL.

Id File: ID_SN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SHS
Last Calibration: 880111 15:08

Operator ID: JOHN
Quant Time: 880111 15:19
Injected at: 880111 11:17

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006115

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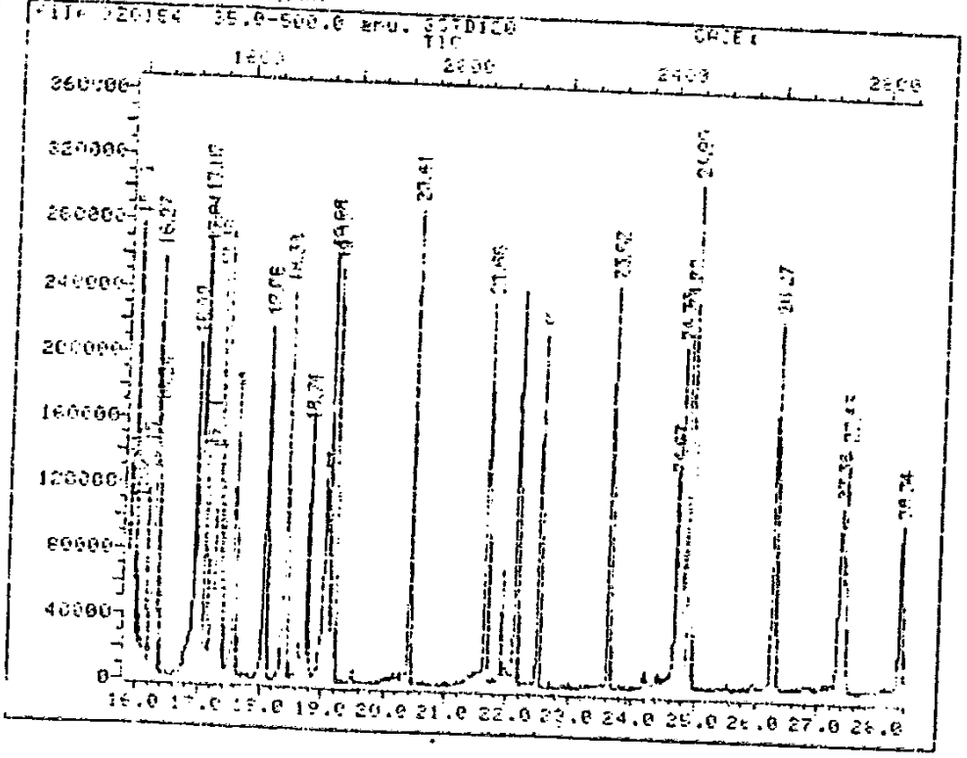
006115

TOTAL ION CHROMATOGRAM



Data File: >Z0154::D3
Name: SSTD120
Misc: C-SB:

Quant Output File: 'Z0154::QT

INST:2 INIT CAL.

Id File: ID_SN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) S-S
Last Calibration: 880111 15:08

Operator ID: JOHN
Quant Time: 880111 15:19
Injected at: 880111 11:17

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006116

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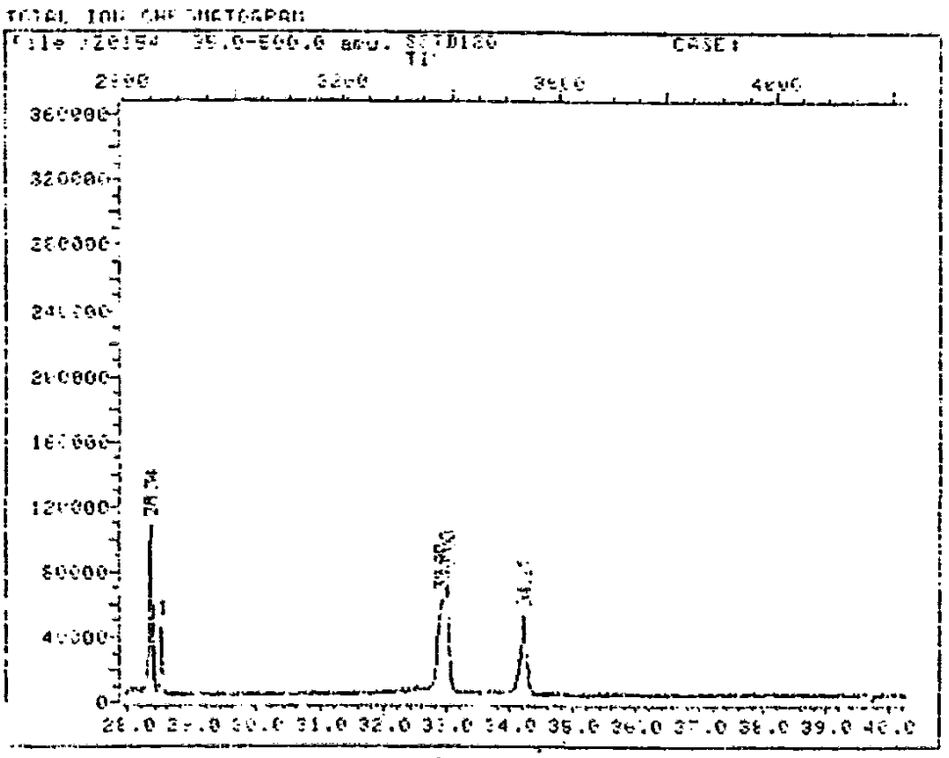
006116

TOTAL ION CHROMATOGRAM



Data File: >Z0154::D3 Quant Output File: >Z0154::QT
Name: SSTD120
Misc: CASE: INST:Z INIT CAL.

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 15:08

Operator ID: JOHN
Quant Time: 880111 15:19
Injected at: 880111 1[illegible]:17

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QUAN REPORT

Operator ID: JOHN
Output File: ^Z0154::DT
Date File: ^Z0154::D3
Time: 55TD:20
Mode: CASE:

Quant Peak: 6 Quant Time: 880111 15:19
Injected at: 880111 11:17
Dilution Factor: 1.00000

INST:Z INIT CAL.

ID File: ID_EN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) S.S
Last Calibration: 880111 15:18

	Compound	R.T.	Q Ion	Area	Conc	Units	%
1)	*1,4-DICHLOROBENZENE-D4	9.37	152.0	30495	40.00	NG/UL	81
2)	PHENOL	8.80	94.0	142418	99.20	NG/UL	92
3)	BIS(2-CHLOROETHYL)ETHER	8.93	93.0	1270044M	107.18	NG/UL	
4)	2-CHLOROPHENOL	9.01	128.0	126063	106.06	NG/UL	84
5)	1,3-DICHLOROBENZENE	9.30	146.0	117870	105.45	NG/UL	93
6)	1,4-DICHLOROBENZENE	9.41	146.0	116546	102.31	NG/UL	98
7)	BENZYL ALCOHOL	9.72	108.0	82877	109.23	NG/UL	92
8)	1,2-DICHLOROBENZENE	9.80	146.0	1174534M	104.61	NG/UL	96
	2-METHYLPHENOL	10.03	108.0	109816	104.64	NG/UL	86
9)	BIS(2-CHLOROISOPROPYL)ETHER	10.08	45.0	2016234M	112.28	NG/UL	
10)	4-METHYLPHENOL	10.32	108.0	113442	103.86	NG/UL	98
11)	N-NITROSO-DI-N-PROPYLAMINE	10.38	70.0	1169274M	113.37	NG/UL	
12)	HEXACHLOROETHANE	10.45	117.0	66430M	102.25	NG/UL	
13)	2-FLUOROPHENOL	6.82	112.0	1259734M	132.91	NG/UL	
14)	PHENOL-D6	8.77	98.0	1722774M	127.37	NG/UL	
15)	*NAPHTHALENE-D8	12.06	136.0	112085	40.00	NG/UL	95
16)	NITROBENZENE	10.67	77.0	1179343M	109.13	NG/UL	
17)	ISOPHORONE	11.15	82.0	301527	110.61	NG/UL	89
18)	2-NITROPHENOL	11.29	139.0	70676	106.95	NG/UL	71
19)	2,4-DIMETHYLPHENOL	11.42	107.0	127193	110.98	NG/UL	92
20)	BENZOIC ACID	11.75	122.0	677396M	117.39	NG/UL	
21)	BIS(2-CHLOROETHOXY)METHANE	11.63	93.0	282038	107.07	NG/UL	97
22)	2,4-DICHLOROPHENOL	11.81	162.0	93794	108.21	NG/UL	90
23)	1,2,4-TRICHLOROBENZENE	11.99	180.0	928[illegible]	101.96	NG/UL	99
24)	NAPHTHALENE	12.13	129.0	314999	97.27	NG/UL	95
25)	4-CHLOROANILINE	12.26	127.0	1205[illegible]	101.04	NG/UL	84
26)	HEXACHLOROBUTADIENE	12.53	225.0	198862	102.72	NG/UL	91
27)	4-CHLORO-3-METHYLPHENOL	13.30	107.0	115916	106.89	NG/UL	84
28)	2-METHYLNAPHTHALENE	13.59	142.0	164276	92.96	NG/UL	93
29)	NITROBENZENE-D5	10.58	82.0	164710	134.34	NG/UL	80
30)	*ACENAPHTHENE-D10	15.86	164.0	98558	40.00	NG/UL	95
31)	HEXACHLOROCYCLOPENTADIENE	14.09	237.0	60919	107.55	NG/UL	98
32)	2,4,6-TRICHLOROPHENOL	14.25	196.0	82270	120.21	NG/UL	91
33)	2,4,5-TRICHLOROPHENOL	14.31	196.0	66573M	90.91	NG/UL	91
34)	2 CHLORONAPHTHALENE	14.63	162.0	170942	95.53	NG/UL	96
35)	2-NITROANILINE	14.90	65.0	1063224M	102.25	NG/UL	
36)	DIMETHYL PHTHALATE	15.39	163.0	218953	98.22	NG/UL	76
37)	ACENAPHTHYLENE	15.53	152.0	275944	92.47	NG/UL	97
38)	2,6-DINITROTOLUENE	15.53	165.0	93657M	94.89	NG/UL	
39)	3-NITROANILINE	15.79	138.0	716494M	108.38	NG/UL	
40)	ACENAPHTHENE	15.93	153.0	177109	92.77	NG/UL	93
41)	[illegible]	16.40	[illegible]	[illegible]	[illegible]	[illegible]	

006118

	Compound	R.T.	Q ion	Area	Conc	Units	Q
4)	DIBENZOFURAN	16.27	168.0	248803	96.14	NG UL	94
45)	2,4-DINITROTOLUENE	16.34	165.0	67430	85.94	NG UL	80
46)	DIETHYLPHTHALATE	16.92	149.0	222879	84.01	NG UL	94
47)	4 CHLOROPHENYL-PHENYLETHER	17.04	204.0	8040[illegible]	87.4[illegible]	NG UL	
49)	FLUORENE	17.02	166.0	192360	89.41	NG UL	96
49)	4-NITROANILINE	17.11	138.0	48313	80.30	NG UL	89
50)	2-FLUOROBIPHENYL	14.43	172.0	210715	116.92	NG UL	99
51)	2,4,6-TRIBROMOPHENOL	17.56	329.7	92505	133.02	NG UL	94
52)	*PHENANTHRENE-D10	19.02	188.0	72004	40.00	NG UL	84
53)	4,6-DINITRO-2-METHYLPHENOL	17.27	198.0	53659	100.36	NG UL	79
54)	N-NITROSODIPHENYLAMINE	17.29	169.0	130101	118.53	NG UL	89
55)	4-BROMOPHENYL-PHENYLETHER	18.06	248.0	63791M	127.39	NG UL	
56)	HEXACHLOROBENZENE	18.38	284.0	87092	123.41	NG UL	89
57)	PENTACHLOROPHENOL	18.74	266.0	41954	125.39	NG UL	97
58)	PHENANTHRENE	19.08	178.0	228890	112.96	NG UL	96
59)	ANTHRACENE	19.17	178.0	239130	104.24	NG UL	95
60)	DI-N-BUTYLPHTHALATE	20.41	149.0	347664	103.62	NG UL	89
61)	FLUORANTHENE	21.66	202.0	202339	95.94	NG UL	92
62)	*CHRYSENE-D12	24.76	240.0	49972	40.00	NG UL	96
63)	PYRENE	21.66	202.0	202339	110.24	NG UL	96
[illegible]	BUTYLBENZYLPHTHALATE	23.62	149.0	139079M	106.41	NG UL	88
[illegible]	3,3'-DICHLOROBENZIDINE	24.67	252.0	91540	98.72	NG UL	94
66)	BENZO(A)ANTHRACENE	24.73	228.0	168010	105.07	NG UL	95
67)	CHRYSENE	24.82	228.0	134872	101.58	NG UL	89
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.90	149.0	200815	113.88	NG UL	90
69)	TERPHENYL-D14	25.90	244.0	165939	142.62	NG UL	98
70)	*PERYLENE-D12	28.91	264.0	47156	40.00	NG UL	96
71)	DI-N-OCTYLPHTHALATE	26.27	149.0	371415	115.85	NG UL	100
72)	BENZO(B)FLUORANTHENE	27.36	252.0	160827	111.62	NG UL	92
73)	BENZO(K)FLUORANTHENE	27.43	252.0	1794.[illegible]	111.05	NG UL	90
74)	BENZO(A)PYRENE	28.34	252.0	141953	114.57	NG UL	92
75)	INDENO(1,2,3-CD)PYRENE	32.90	276.0	1[illegible]	98.57	NG UL	96
76)	DIBENZ(A,H)ANTHRACENE	33.00	278.0	1114.[illegible]	95.84	NG UL	95
77)	BENZO(G,H,I)PERYLENE	34.21	276.0	1.88[illegible]	96.9[illegible]	NG UL	98

* Compound is ISTD

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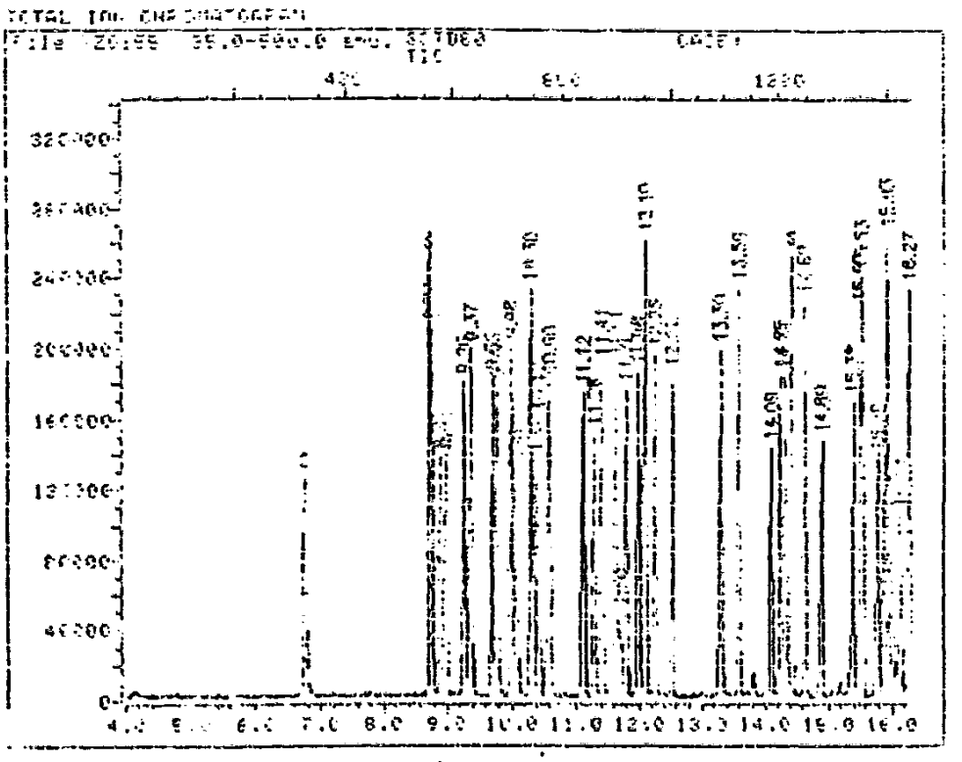

Data File: 20155::D3 Quant Output File: 20155::QT
Name: SS'D3
Misc: C :E: INST:2 INIT CAL.

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 15:09

Operator ID: JOHN
Quant Time: 880111 15:39
Injected at: 880111 12:11

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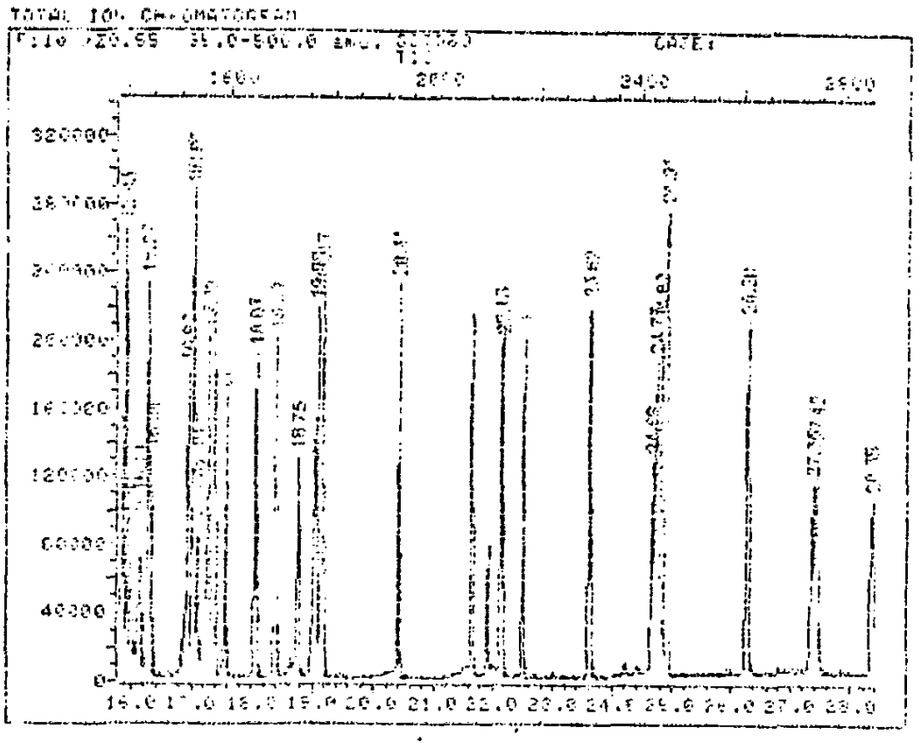

Data File: [illegible]:03 Quant Output File: [illegible]:QT
Name: SITD[illegible]
Misc: CASE: INST:2 INIT CAL.

Id File: ID_[illegible]2::CX
Title: [illegible] ORGANIC ANALYSIS (EPA 62[illegible] SA[illegible]
Last Calibration: 880.11 15:08

Operator ID: [illegible]
Quant Time: 880111 15:39
Injected at: 880111 12:11

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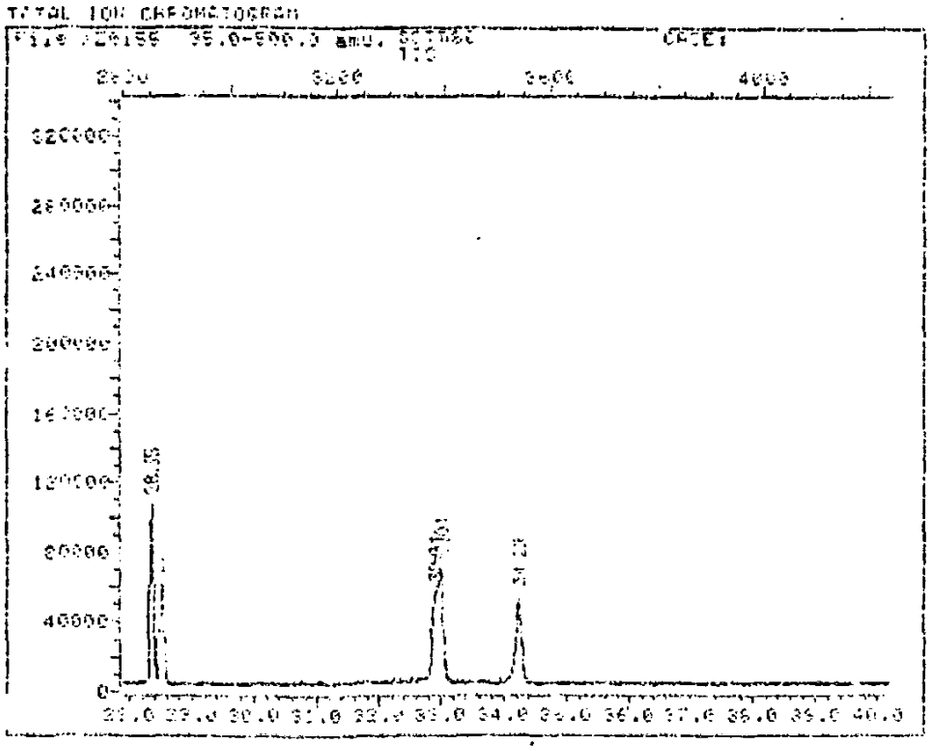
TOTAL ION CHROMATOGRAM



Data File: >Z0155::D3 Quant Output File: >Z0155::QT
Name: SSTC20
Misc: CASE: INST:2 INIT CAL.

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 980111 15:08

Operator ID: JOHN
Quant Time: 880111 15:39
Injected at: 880111 12:11

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QUANT REPORT

Operator ID: JOHN Quant Seq: 6 Quant Time: 880111 19:39
Output File: ^ZJ19[illegible]::OT Injected at: 880111 17:11
Data File: >Z0155::03 Dilution Factor: 1.00000
Name: SSTD50
Misc: CASE: INST:Z INIT CAL.

ID File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 609) SHS
Last Calibration: 880111 19:08

	Compound	R.T.	Q Ion	Area	Conc	Units	Q
1)	*1,4-DICHLOROBENZENE-D4	8.34	150.0	3[illegible]	40.00	NG/UL	87
2)	PHENOL	8.76	94.0	115152	70.01	NG/UL	99
3)	BIS(2-CHLOROETHYL)ETHER	8.89	93.0	1.22688M	72.82	NG/UL	
4)	2-CHLOROPHENOL	8.96	128.0	95297	69.96	NG/UL	83
5)	1,3-DICHLOROBENZENE	9.26	146.0	94088	75.44	NG/UL	91
6)	1,4-DICHLOROBENZENE	9.37	146.0	92560	70.90	NG/UL	98
7)	BENZYL ALCOHOL	9.69	108.0	67027	72.91	NG/UL	95
8)	1,2-DICHLOROBENZENE	9.77	146.0	69813M	69.78	NG/UL	94
9)	2-METHYLPHENOL	9.98	108.0	85227	70.86	NG/UL	99
10)	BIS(2-CHLOROISOPROPYL)ETHER	10.05	45.0	1541598M	74.91	NG/UL	
11)	4-METHYLPHENOL	10.30	108.0	8[illegible]218	66.86	NG/UL	[illegible]
12)	N-NITROSO-DI-N-PROPYLAMINE	10.35	70.0	586073M	74.93	NG/UL	
13)	HEXACHLOROETHANE	10.42	117.0	52812M	70.92	NG/UL	
14)	2-FLUOROPHENOL	6.74	112.0	1008288M	96.32	NG/UL	
15)	PHENOL-D5	8.72	99.0	1093188M	86.95	NG/UL	
16)	*NAPHTHALENE-D8	12.05	136.0	119681	40.00	NG/UL	97
17)	NITROBENZENE	10.60	77.0	12[illegible]	75.66	NG/UL	
18)	ISOPHORONE	11.12	82.0	123753	76.87	NG/UL	90
19)	2-NITROPHENOL	11.25	139.0	52819	74.89	NG/UL	68
20)	2,4-DIMETHYLPHENOL	11.41	107.0	93962	76.78	NG/UL	82
21)	BENZOIC ACID	11.70	122.0	4898[illegible]M	74.51	NG/UL	
22)	BIS(2-CHLOROETHOXY)METHANE	11.61	93.0	135444	74.63	NG/UL	99
23)	2,4-DICHLOROPHENOL	11.76	162.0	69887	76.29	NG/UL	[illegible]
24)	1,2,4-TRICHLOROBENZENE	11.98	180.0	108[illegible]4	72.99	NG/UL	91
25)	NAPHTHALENE	12.10	128.0	2[illegible]087[illegible]	71.92	NG/UL	90
26)	4-CHLOROANILINE	12.25	127.0	90075	70.70	NG/UL	91
27)	HEXACHLOROBUTADIENE	12.52	225.0	4[illegible]948	73.81	NG/UL	[illegible]
28)	4-CHLORO-3-METHYLPHENOL	13.30	107.0	87266	75.36	NG/UL	82
29)	2-METHYLNAPHTHALENE	13.59	142.0	1[illegible]9627	70.81	NG/UL	98
30)	NITROBENZENE-D5	10.56	82.0	134084	102.42	NG/UL	80
31)	*ACENAPHTHENE-D10	15.86	164.0	66193	40.00	NG/UL	[illegible]
32)	HEXACHLOROCYCLOPENTADIENE	14.09	237.0	49157	77.52	NG/UL	93
33)	2,4,6-TRICHLOROPHENOL	14.29	196.0	52892M	79.13	NG/UL	96
34)	2,4,5-TRICHLOROPHENOL	14.31	196.0	54724	72.78	NG/UL	97
35)	2-CHLORONAPHTHALENE	14.62	162.0	127974	69.74	NG/UL	94
36)	2-NITROANILINE	14.89	65.0	89463M	75.28	NG/UL	
37)	DIMETHYL PHTHALATE	15.38	163.0	1[illegible]6703	72.73	NG/UL	77
38)	ACENAPHTHYLENE	15.53	152.0	212783	69.37	NG/UL	99
39)	2,6-DINITROTOLUENE	15.50	165.0	41027M	70.58	NG/UL	
40)	3-NITROANILINE	15.78	138.0	53842M	79.23	NG/UL	
41)	ACENAPHTHENE	15.97	153.0	1[illegible]63[illegible]2	69.49	NG/UL	[illegible]
42)	2,4-DINITROPHENOL	16.00	184.0	23759M	66.15	NG/UL	
43)	4-NITROPHENOL	16.1[illegible]	109.0	28677M	77.27	NG/UL	

006123

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006123

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	DIBENZOFURAN	16.27	168.0	287173	70.35	NG/UL	83
45)	2,4-DINITROTOLUENE	16.34	165.0	98581	79.17	NG/UL	74
46)	DIETHYLPHTHALATE	16.92	149.0	1073449	76.03	NG/UL	97
47)	4-CHLOROPHENYL-PHENYLETHER	17.03	204.0	64236	67.93	NG/UL	89
48)	FLUORENE	17.02	166.0	119875	68.41	NG/UL	97
49)	4-NITROANILINE	17.10	138.0	41856	67.66	NG/UL	86
50)	2-FLUOROBIPHENYL	14.43	172.0	165149	96.62	NG/UL	98
51)	2,4,6-TRIBROMOPHENOL	17.57	324.7	49526	112.20	NG/UL	82
52)	*PHENANTHRENE-D10	19.02	188.0	91650	40.00	NG/UL	84
53)	4,6-DINITRO-2-METHYLPHENOL	17.21	198.0	336221	79.77	NG/UL	
54)	N-NITROSODIPHENYLAMINE	17.29	169.0	102346	77.29	NG/UL	92
55)	4-BROMOPHENYL-PHENYLETHER	18.07	248.0	492681	74.87	NG/UL	
56)	HEXACHLOROBENZENE	18.39	284.0	68497	76.25	NG/UL	89
57)	PENTACHLOROPHENOL	18.79	264.0	17234	63.93	NG/UL	92
58)	PHENANTHRENE	19.08	178.0	149110	76.32	NG/UL	96
59)	ANTHRACENE	19.17	178.0	1124791	68.61	NG/UL	95
60)	DI-N-BUTYLPHTHALATE	20.41	149.0	2819114	66.80	NG/UL	86
61)	FLUORANTHENE	22.13	202.0	1710449	67.73	NG/UL	93
62)	*CHRYSENE-D12	24.76	240.0	62569	40.00	NG/UL	97
63)	PYRENE	22.13	202.0	1710449	73.31	NG/UL	92
64)	BUTYLBENZYLPHTHALATE	23.62	149.0	1195001	71.68	NG/UL	
65)	3,3'-DICHLOROBENZIDINE	24.68	252.0	4774	71.92	NG/UL	92
	BENZO(A)ANTHRACENE	24.73	228.0	161141	79.10	NG/UL	94
67)	CHRYSENE	24.82	228.0	149099	76.36	NG/UL	89
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.91	149.0	1825854	81.38	NG/UL	81
69)	TERPHENYL-D14	27.90	244.0	176917	98.71	NG/UL	95
70)	*PERYLENE-D12	28.52	264.0	67173	40.00	NG/UL	96
71)	DI-N-OCTYLPHTHALATE	24.28	149.0	2937897	79.86	NG/UL	100
72)	BENZO(B)FLUORANTHENE	27.36	252.0	147797	72.10	NG/UL	94
73)	BENZO(K)FLUORANTHENE	27.42	252.0	1139781	75.02	NG/UL	90
74)	BENZO(A)PYRENE	28.35	252.0	133645	75.98	NG/UL	95
75)	INDENO(1,2,3-CD)PYRENE	32.91	276.0	198874	65.56	NG/UL	98
76)	DIBENZ(A,H)ANTHRACENE	33.01	278.0	110774	66.96	NG/UL	98
77)	BENZO(G,H,I)PERYLENE	34.27	276.0	137447	69.22	NG/UL	97

* Compound is ISTD

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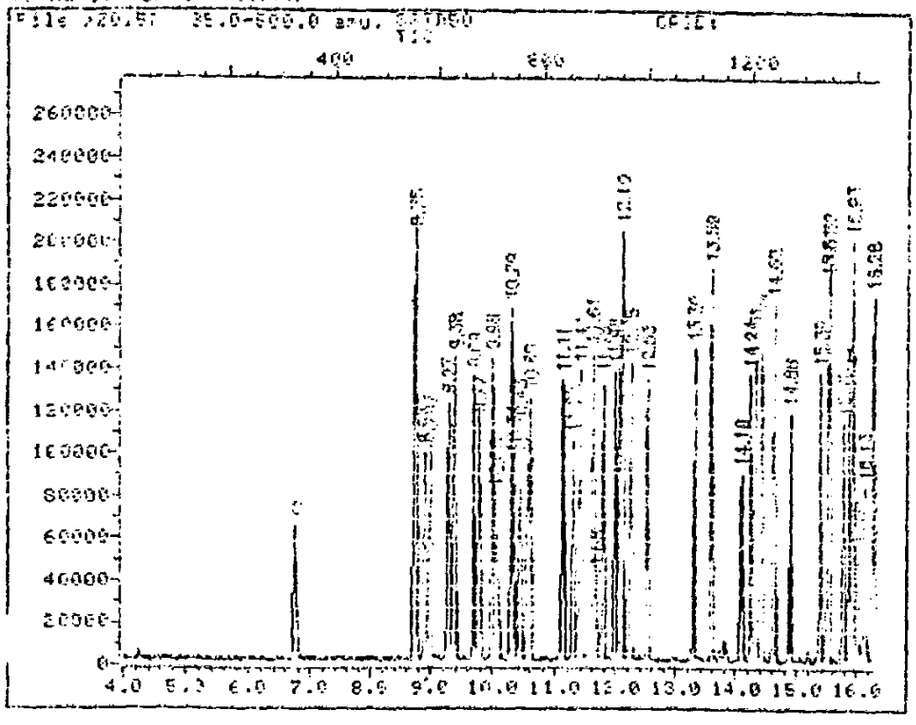
TOTAL ION CHROMATOGRAM



Data File: >Z0157::D2 Quant Output File: ^Z0157::Q1
Name: SSTD50
Misc: CASE: INST:Z INIT CAL.

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 870713 13:45

Operator ID: JOHN
Quant Time: 880111 14:36
Injected at: 880111 13:53

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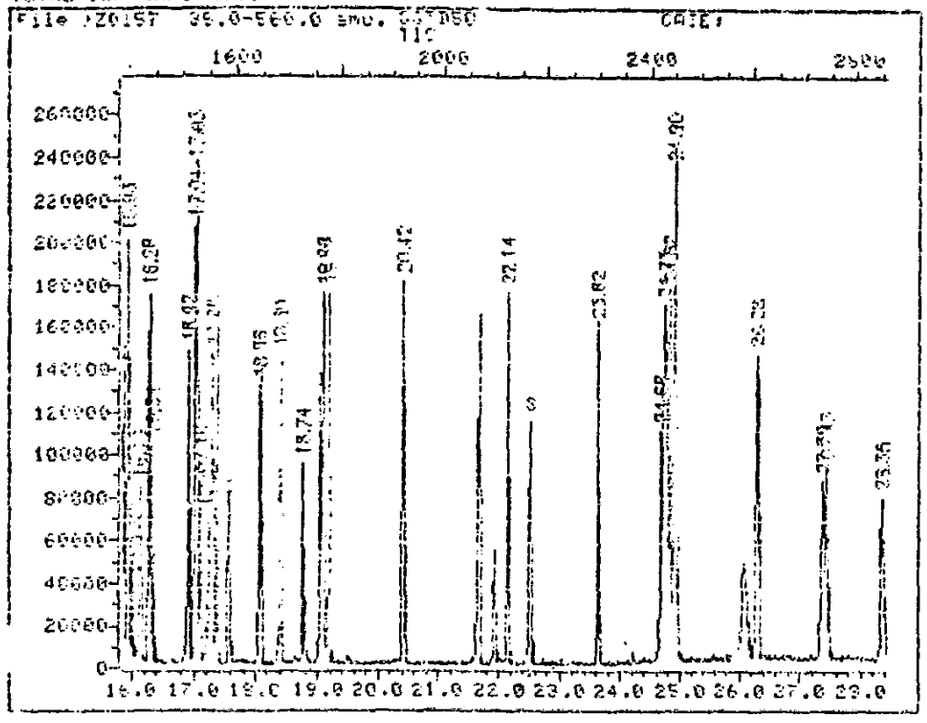
TOTAL ION CHROMATOGRAM



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Name: SSTD50
Misc: CASE: INST:Z INIT CAL.

Id File: ID_PN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 870713 13:45

Operator ID: JOHN
Quant Time: 880111 14:36
Injected at: 880111 12:53

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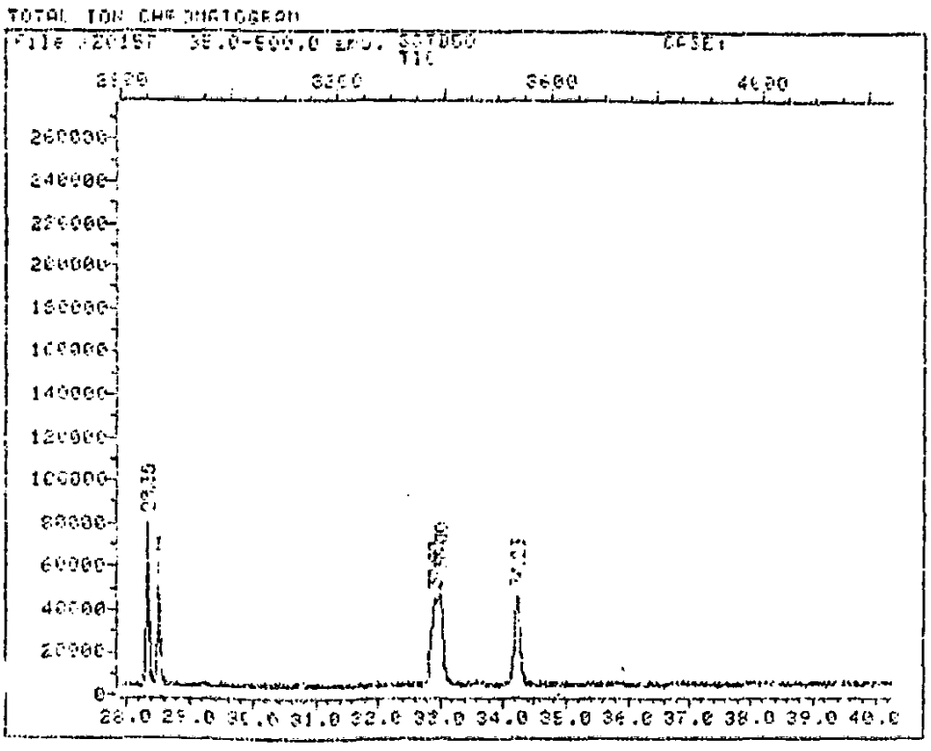
TOTAL ION CHROMATOGRAM



Data File: >Z0157::D2 Quant Output File: ^Z0157::GT
Name: SST050
Misc: CASE: INST:2 INIT CAL.

Id File: ID_SN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 870713 13:45

Operator ID: JOHN
Quant Time: 880111 14:36
Injected at: 880111 13:53

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QUANT REPORT

Operator ID: JOHN Quant Rev: 6 Quant Time: 880111 14:36
Output File: ^Z0157::07 Injected at: 880111 13:53
Data File: >Z0157::02 Dilution Factor: 1.00000
Name: SSTD50
Misc: CASE: INST:Z INIT CAL.

ID File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 870713 13:45

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*1,4-DICHLOROBENZENE-D4	9.39	152.0	33897	40.00	NG/UL	89
2)	PHENOL	8.75	94.0	29764	29764.00	NO CALIB	76
3)	BIS(2-CHLOROETHYL)ETHER	8.90	93.0	81392M	81392.00	NO CALIB	
4)	2-CHLOROPHENOL	8.97	128.0	66041	66041.00	NO CALIB	82
5)	1,3-DICHLOROBENZENE	9.27	146.0	62108	62108.00	NO CALIB	89
6)	1,4-DICHLOROBENZENE	9.38	146.0	63290	63290.00	NO CALIB	95
7)	BENZYL ALCOHOL	9.69	108.0	42156	42156.00	NO CALIB	94
8)	1,2-DICHLOROBENZENE	9.77	146.0	62401	62401.00	NO CALIB	92
9)	2-METHYLPHENOL	9.98	108.0	58312	58312.00	NO CALIB	69
10)	BIS(2-CHLOROISOPROPYL)ETHER	10.06	45.0	99725	99725.00	NO CALIB	83
11)	4-METHYLPHENOL	10.29	108.0	60686	60686.00	NO CALIB	94
12)	N-NITROSO-DI-N-PROPYLAMINE	10.34	70.0	57327M	57327.00	NO CALIB	
13)	HEXACHLOROETHANE	10.43	117.0	36099M	36099.00	NO CALIB	
14)	2-FLUOROPHENOL	6.75	112.0	50751M	50751.00	NO CALIB	
15)	PHENOL-D6	8.73	99.0	59574M	59574.00	NO CALIB	
16)	*NAPHTHALENE D8	12.06	136.0	121181	40.00	NG/UL	94
17)	NITROBENZENE	10.60	77.0	81944M	81944.00	NO CALIB	
18)	ISOPHORONE	11.11	82.0	147389	147389.0	NO CALIB	90
19)	2-NITROPHENOL	11.28	139.0	35734M	35734.00	NO CALIB	
20)	2,4-DIMETHYLPHENOL	11.41	107.0	61957	61957.00	NO CALIB	81
21)	BENZOIC ACID	11.69	122.0	31191M	31191.00	NO CALIB	
22)	BIS(2-CHLOROETHOXY)METHANE	11.61	93.0	91911	91911.00	NO CALIB	99
23)	2,4-DICHLOROPHENOL	11.79	162.0	46358	46358.00	NO CALIB	90
24)	1,2,4-TRICHLOROBENZENE	11.98	180.0	49109	49109.00	NO CALIB	90
25)	NAPHTHALENE	12.10	128.0	169500	169500.0	NO CALIB	95
26)	4-CHLORO-ANILINE	12.25	127.0	64504	64504.00	NO CALIB	87
27)	HEXACHLOROBUTADIENE	12.53	225.0	31519	31519.00	NO CALIB	95
28)	4-CHLORO-3-METHYLPHENOL	13.30	107.0	58620	58620.00	NO CALIB	82
29)	2-METHYLNAPHTHALENE	13.59	142.0	95534	95534.00	NO CALIB	94
30)	NITROBENZENE-D5	10.55	82.0	66279	66279.00	NO CALIB	84
31)	*ACENAPHTHENE-D10	15.87	164.0	60099	40.00	NG/UL	97
32)	HEXACHLOROCYCLOPENTADIENE	14.10	237.0	29067	29067.00	NO CALIB	92
33)	2,4,6-TRICHLOROPHENOL	14.24	196.0	35120M	35120.00	NO CALIB	95
34)	2,4,5-TRICHLOROPHENOL	14.31	196.0	37578	37578.00	NO CALIB	95
35)	2-CHLORONAPHTHALENE	14.62	162.0	91610	91610.00	NO CALIB	94
36)	2-NITROANILINE	14.88	65.0	53358M	53358.00	NO CALIB	
37)	DIMETHYL PHTHALATE	15.39	163.0	114419	114419.0	NO CALIB	77
38)	ACENAPHTHYLENE	15.52	152.0	153130	153130.0	NO CALIB	98
39)	2,6-DINITROTOLUENE	15.51	165.0	29017M	29017.00	NO CALIB	
40)	3-NITROANILINE	15.78	138.0	33929M	33929.00	NO CALIB	
41)	ACENAPHTHENE	15.93	153.0	97966	97966.00	NO CALIB	91
42)	2,4-DINITROPHENOL	15.99	184.0	13767M	13767.00	NO CALIB	

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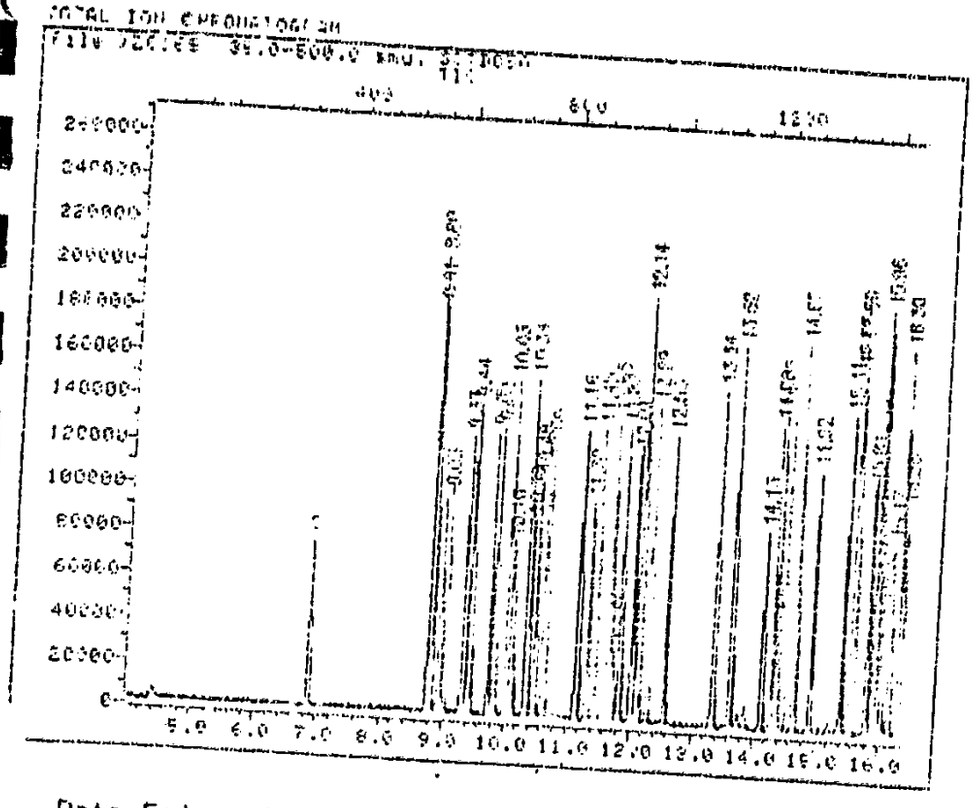
	Compound	R.T.	Q ion	Area	Conc	Units	Q
44)	DIBENZOFURAN	16.28	168.0	132803	132803.0	NO CALIB	76
45)	2,4-DINITROTOLUENE	16.34	165.0	38905	38905.00	NO CALIB	76
46)	DIETHYLPHTHALATE	16.92	149.0	136142	136142.0	NO CALIB	92
47)	4-CHLOROPHENYL-PHENYLETHER	17.03	204.0	47206	47206.00	NO CALIB	82
48)	FLUORENE	17.01	166.0	87447	87447.00	NO CALIB	93
49)	4-NITROANILINE	17.10	138.0	30873	30873.00	NO CALIB	82
50)	2-FLUOROBIPHENYL	14.42	172.0	91007	91007.00	NO CALIB	99
51)	2,4,6-TRIBROMOPHENOL	17.56	329.7	20256	20256.00	NO CALIB	88
52)	*PHENANTHRENE-D10	19.03	188.0	87928	40.00	NG/UL	78
53)	4,6-DINITRO-2-METHYLPHENOL	17.22	198.0	20475M	20475.00	NO CALIB	
54)	N-NITROSODIPHENYLAMINE	17.28	169.0	67019	67019.00	NO CALIB	91
55)	4-BROMOPHENYL-PHENYLETHER	18.06	248.0	31566M	31566.00	NO CALIB	
56)	HEXACHLOROBENZENE	18.39	284.0	43090	43090.00	NO CALIB	84
57)	PENTACHLOROPHENOL	18.74	266.0	20436	20436.00	NO CALIB	90
58)	PHENANTHRENE	19.08	178.0	122631	122631.0	NO CALIB	96
59)	ANTHRACENE	19.17	178.0	120611	120611.0	NO CALIB	99
60)	DI-N-BUTYLPHTHALATE	20.42	149.0	204879	204879.0	NO CALIB	86
61)	FLUORANTHENE	22.14	202.0	128776	128776.0	NO CALIB	77
62)	*CHRYSENE-D12	24.76	240.0	70194	40.00	NG/UL	97
63)	PYRENE	22.14	202.0	128776	128776.0	NO CALIB	67
64)	BUTYLBENZYLPHTHALATE	23.62	149.0	91740	91740.00	NO CALIB	77
65)	3,3'-DICHLOROBENZIDINE	24.66	252.0	36635	36635.00	NO CALIB	94
66)	BENZO(A)ANTHRACENE	24.73	228.0	112270	112270.0	NO CALIB	92
67)	CHRYSENE	24.82	228.0	107014	107014.0	NO CALIB	87
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.90	149.0	123805	123805.0	NO CALIB	80
69)	TERPHENYL-D14	22.50	244.0	76541	76541.00	NO CALIB	96
70)	*PERYLENE-D12	28.52	264.0	69851	40.00	NG/UL	98
71)	DI-N-OCTYLPHTHALATE	26.28	149.0	201476M	201476.0	NO CALIB	00
72)	BENZO(B)FLUORANTHENE	27.36	252.0	106644	106644.0	NO CALIB	96
73)	BENZO(K)FLUORANTHENE	27.42	252.0	92912M	92912.00	NO CALIB	92
74)	BENZO(A)PYRENE	28.35	252.0	91649	91649.00	NO CALIB	96
75)	INDENO(1,2,3-CD)PYRENE	32.92	276.0	113986M	113986.0	NO CALIB	
76)	DIBENZ(A,H)ANTHRACENE	33.00	278.0	86059M	86059.00	NO CALIB	
77)	BENZO(G,H,I)PERYLENE	34.23	276.0	90733M	90733.00	NO CALIB	

* Compound is ISTD

006129



Data File: >Z0165::L2
Name: SSTD050
Misc:

Quant Output File: >Z0165::QT

INST: Z

Id File: IC_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 22:04

Operator ID: JOHN
Quant Time: 880111 23:07
Injected at: 880111 22:27

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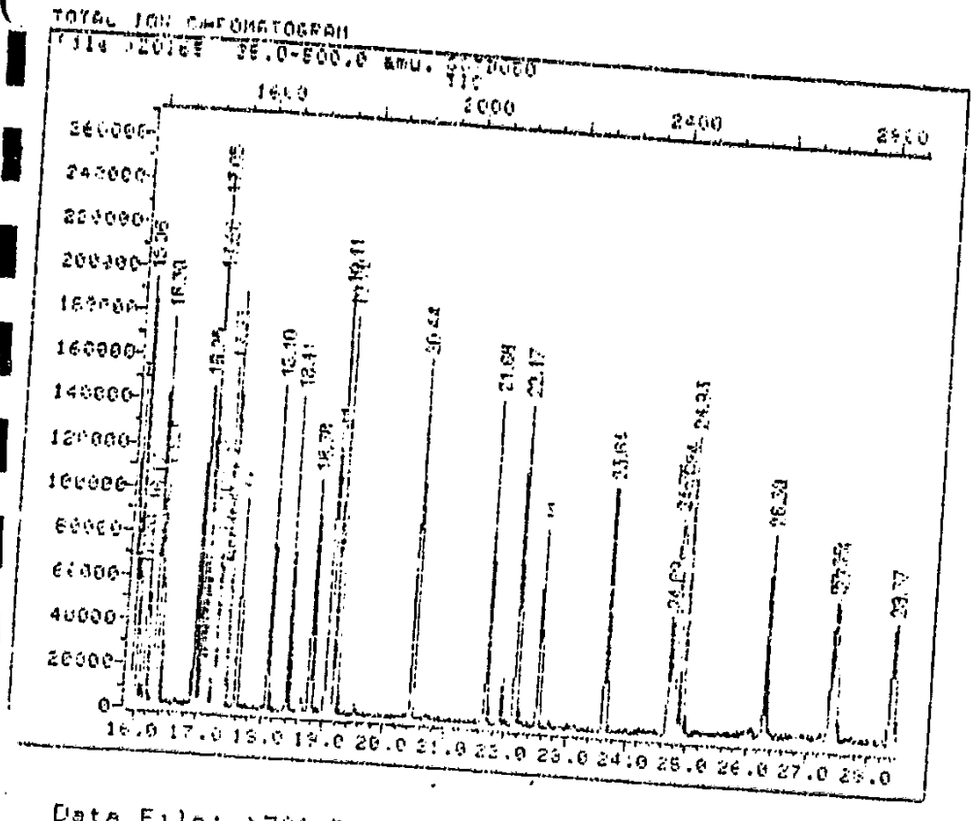

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Name: SSTD050
Misc:

Quant Output File: ^Z0165::Q1

INST: Z

Id File: IC_BIG::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 22:59

Operator ID: JOHN
Quant Time: 880111 23:07
Injected at: 880111 22:27

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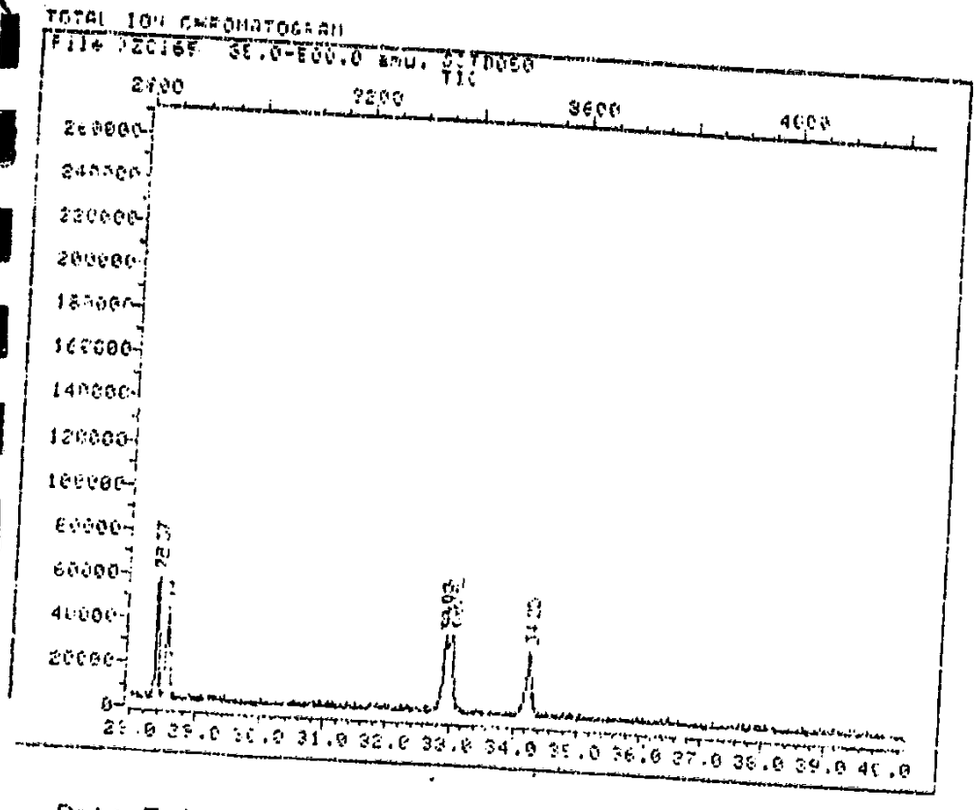

Data File: >Z0165::L2
Name: SSTD050
Misc:

Quant Output File: >Z0165::QT

INST: Z

Id File: ID_EN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) GAS
Last Calibration: 880111 22:59

Operator ID: JOHN
Quant Time: 880111 23:07
Injected at: 880111 22:27

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QUANT REPORT

Operator ID: JOHN
Output File: ^Z0165::DT
Data File: >Z0165::L2
Name: SSTC050
Misc:

Quant Form: 6

Quant Time: 880111 23:07
Injected at: 880111 22:27
Dilution Factor: 1.00000

INST: Z

ID File: ID_EN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 22:59

	Compound	R.T.	Q ion	Area	Conc	Units	%
1)	*1,4-DICHLOROBENZENE-D4	9.40	152.0	34108	40.00	NG/UL	92
2)	PHENOL	8.81	94.0	80780	52.47	NG/UL	78
3)	BIS(2-CHLOROETHYL)ETHER	8.80	93.0	922670	54.98	NG/UL	
4)	2-CHLOROPHENOL	9.03	128.0	66296M	51.38	NG/UL	
5)	1,3-DICHLOROBENZENE	9.33	146.0	63887	52.07	NG/UL	95
6)	1,4-DICHLOROBENZENE	9.44	146.0	64328	53.29	NG/UL	96
7)	BENZYL ALCOHOL	9.79	108.0	41812	50.45	NG/UL	94
8)	1,2-DICHLOROBENZENE	9.82	146.0	641740	53.53	NG/UL	95
9)	2-METHYLPHENOL	10.03	108.0	57744	51.67	NG/UL	89
10)	BIS(2-CHLOROISOPROPYL)ETHER	10.10	45.0	100082	50.69	NG/UL	91
11)	4-METHYLPHENOL	10.34	108.0	60249	54.45	NG/UL	98
12)	N-NITROSO-DI-N-PROPYLAMINE	10.38	70.0	575620	50.37	NG/UL	
13)	HEXACHLOROETHANE	10.48	117.0	32532M	49.57	NG/UL	
14)	2-FLUOROPHENOL	6.85	112.0	526680	46.84	NG/UL	
15)	PHENOL-D5	8.79	99.0	608940	50.60	NG/UL	
16)	*NAPHTHALENE-D8	12.10	136.0	117776	40.00	NG/UL	96
17)	NITROBENZENE	10.64	77.0	81470M	52.51	NG/UL	
18)	ISOPHORONE	11.36	82.0	148385	51.54	NG/UL	89
19)	2-NITROPHENOL	11.32	139.0	32014	55.21	NG/UL	77
20)	2,4-DIMETHYLPHENOL	11.45	107.0	62450M	52.17	NG/UL	
21)	BENZOIC ACID	11.72	122.0	31078M	52.65	NG/UL	
22)	BIS(2-CHLOROETHOXY)METHANE	11.65	93.0	91431	51.58	NG/UL	98
23)	2,4-DICHLOROPHENOL	11.82	162.0	47239	52.81	NG/UL	88
24)	1,2,4-TRICHLOROBENZENE	12.01	180.0	49875	54.37	NG/UL	92
25)	NAPHTHALENE	12.14	128.0	169512	54.62	NG/UL	99
26)	4-CHLOROANILINE	12.29	127.0	56544	48.34	NG/UL	94
27)	HEXACHLOROBUTADIENE	12.5[illegible]	2.5.0	32143	55.12	NG/UL	92
28)	4-CHLORO-3-METHYLPHENOL	13.34	107.0	599470	52.70	NG/UL	
29)	2-METHYLNAPHTHALENE	13.62	142.0	91650	54.17	NG/UL	94
30)	NITROBENZENE-D5	10.60	82.0	66787	48.46	NG/UL	82
31)	*ACENAPHTHENE-D10	15.89	164.0	62133	40.00	NG/UL	93
32)	HEXACHLOROCYCLOPENTADIENE	14.13	237.0	28676	48.86	NG/UL	95
33)	2,4,6-TRICHLOROPHENOL	14.28	196.0	35469M	46.34	NG/UL	99
34)	2,4,5-TRICHLOROPHENOL	14.35	196.0	39370	61.45	NG/UL	95
35)	2-CHLORONAPHTHALENE	14.65	162.0	90444	52.05	NG/UL	93
36)	2-NITROANILINE	14.92	65.0	535060	52.58	NG/UL	
37)	DIMETHYL PHTHALATE	15.41	163.0	113565	53.66	NG/UL	77
38)	ACENAPHTHYLENE	15.56	152.0	153121	52.66	NG/UL	97
39)	2,6-DINITROTOLUENE	15.53	165.0	291970	48.22	NG/UL	
40)	3-NITROANILINE	15.81	138.0	362370	54.26	NG/UL	
41)	ACENAPHTHENE	15.96	153.0	97089	51.92	NG/UL	
42)	2,4-DINITROPHENOL	16.03	184.0	160880	54.33	NG/UL	
43)	4-NITROPHENOL	16.17	109.0	[illegible]			

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	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	DIBENZOFURAN	16.30	168.0	131566	51.75	NG/UL	79
45)	2,4-DINITROTOLUENE	16.36	165.0	37986	51.51	NG/UL	96
46)	DIETHYLPHTHALATE	16.95	149.0	136402	51.72	NG/UL	95
47)	4-CHLOROPHENYL-PHENYLETHER	17.06	204.0	46615M	57.84	NG/UL	
48)	FLUORENE	17.05	166.0	84740	51.28	NG/UL	93
49)	4-NITROANILINE	17.13	138.0	32970	65.51	NG/UL	87
50)	2-FLUOROBIPHENYL	14.46	172.0	93881	48.96	NG/UL	99
51)	2,4,6-TRIBROMOPHENOL	17.59	329.7	23358	50.67	NG/UL	90
52)	*PHENANTHRENE-D10	19.05	188.0	95500	40.00	NG/UL	84
53)	4,6-DINITRO-2-METHYLPHENOL	17.24	198.0	21324M	48.35	NG/UL	
54)	N-NITROSODIPHENYLAMINE	17.32	169.0	70211	46.99	NG/UL	85
55)	4-BROMOPHENYL-PHENYLETHER	18.10	248.0	32859M	47.93	NG/UL	
56)	HEXACHLOROBENZENE	18.41	284.0	45599	47.21	NG/UL	87
57)	PENTACHLOROPHENOL	18.78	266.0	25171	53.56	NG/UL	95
58)	PHENANTHRENE	19.11	178.0	124122M	46.28	NG/UL	98
59)	ANTHRACENE	19.20	178.0	125327	50.40	NG/UL	96
60)	DI-N-BUTYLPHTHALATE	20.44	149.0	199646	47.20	NG/UL	86
61)	FLUORANTHENE	21.68	202.0	111769	44.27	NG/UL	94
62)	*CHRYSENE-D12	24.79	240.0	46397	40.00	NG/UL	95
63)	PYRENE	22.17	202.0	108896M	65.00	NG/UL	96
64)	BUTYLBENZYLPHTHALATE	23.64	149.0	59212	51.50	NG/UL	78
65)	3,3'-DICHLOROBENZIDINE	24.69	252.0	22594	49.26	NG/UL	97
[illegible])	BENZO(A)ANTHRACENE	24.75	228.0	74314	50.12	NG/UL	95
[illegible])	CHRYSENE	24.84	228.0	72647	52.87	NG/UL	90
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.93	149.0	81999	49.46	NG/UL	82
69)	TERPHENYL-D14	22.52	244.0	59841	53.83	NG/UL	99
70)	*PERYLENE-D12	28.54	264.0	49146M	40.00	NG/UL	
71)	DI-N-OCTYLPHTHALATE	26.30	149.0	126650M	46.21	NG/UL	100
72)	BENZO(B)FLUORANTHENE	27.38	252.0	76475M	53.16	NG/UL	92
73)	BENZO(K)FLUORANTHENE	27.44	252.0	59338M	48.09	NG/UL	92
74)	BENZO(A)PYRENE	28.37	252.0	64518M	51.64	NG/UL	
75)	INDENO(1,2,3-CD)PYRENE	32.92	276.0	83893M	60.67	NG/UL	93
76)	DIBENZ(A,H)ANTHRACENE	33.02	278.0	61394M	57.22	NG/UL	
77)	BENZO(G,H,I)PERYLENE	34.25	276.0	67072M	59.59	NG/UL	

* Compound is ISTD

006134

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 8704Z Calibration Date: 1/12/88 Time: 12:54

Lab File ID: Z0172 Init. Calib. Date(s): 1/11/88 1/11/88

Min RRF50 for SPCC(#) = .050

Max %D for CCC(*) is 25.0%

COMPOUND		RRF	RRF50	%D	
PHENOL	*	1.763	1.849	4.9	*
BIS(2-CHLOROETHYL)ETHER		1.921	1.927	.3	
2-CHLOROPHENOL		1.493	1.515	1.5	
1,3-DICHLOROBENZENE		1.410	1.475	4.6	
1,4-DICHLOROBENZENE	*	1.380	1.477	7.0	*
BENZYL ALCOHOL		.960	.980	2.1	
1,2-DICHLOROBENZENE		1.404	1.477	5.2	
2-METHYLPHENOL		1.293	1.368	5.7	
BIS(2-CHLOROISOPROPYL)ETHER		2.279	2.268	.5	
4-METHYLPHENOL		1.250	1.418	13.4	
N-NITROSO-DI-N-PROPYLAMINE	#	1.323	1.356	2.5	#
HEXACHLOROETHANE		.769	.825	7.2	
NITROBENZENE		.513	.565	10.1	
ISOPHORONE		.962	1.037	7.9	
2-NITROPHENOL	*	.224	.237	5.7	*
2,4-DIMETHYLPHENOL		.399	.428	7.3	
BENZOIC ACID		.198	.229	16.0	
BIS(2-CHLOROETHOXY)METHANE		.589	.628	6.7	
2,4-DICHLOROPHENOL	*	.298	.375	25.8	*
1,2,4-TRICHLOROBENZENE		.302	.329	9.2	
NAPHTHALENE		1.021	1.109	8.7	
4-CHLOROANILINE		.384	.396	3.2	
HEXACHLOROBUTADIENE	*	.192	.207	7.5	*
4-CHLORO-3-METHYLPHENOL	*	.379	.404	6.5	*
2-METHYLNAPHTHALENE		.557	.622	11.7	
HEXACHLOROCYCLOPENTADIENE	#	.372	.368	1.1	#
2,4,6-TRICHLOROPHENOL	*	.496	.456	8.0	*
2,4,5-TRICHLOROPHENOL		.426	.515	21.0	
2-CHLORONAPHTHALENE		1.091	1.185	8.6	
2-NITROANILINE		.652	.749	15.0	
DIMETHYL PHTHALATE		1.283	1.527	19.0	
ACENAPHTHYLENE		1.816	2.027	11.6	
2,6-DINITROTOLUENE		.401	.382	4.7	
3-NITROANILINE		.427	.478	12.1	
ACENAPHTHENE	*	1.169	1.287	10.1	*
2,4-DINITROPHENOL	#	.192	.212	10.2	#
4-NITROPHENOL	#	.208	.259	24.7	#

006135

FORM VII SV-1

1/88 Rev.

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 8704Z Calibration Date: 1/12/88 Time: 12:54

Lab File ID: Z0172 Init. Calib. Date(s): 1/11/88 1/11/88

Min RRF50 for SPCC(#) = .050

Max %D for CCC(*) is 25.0%

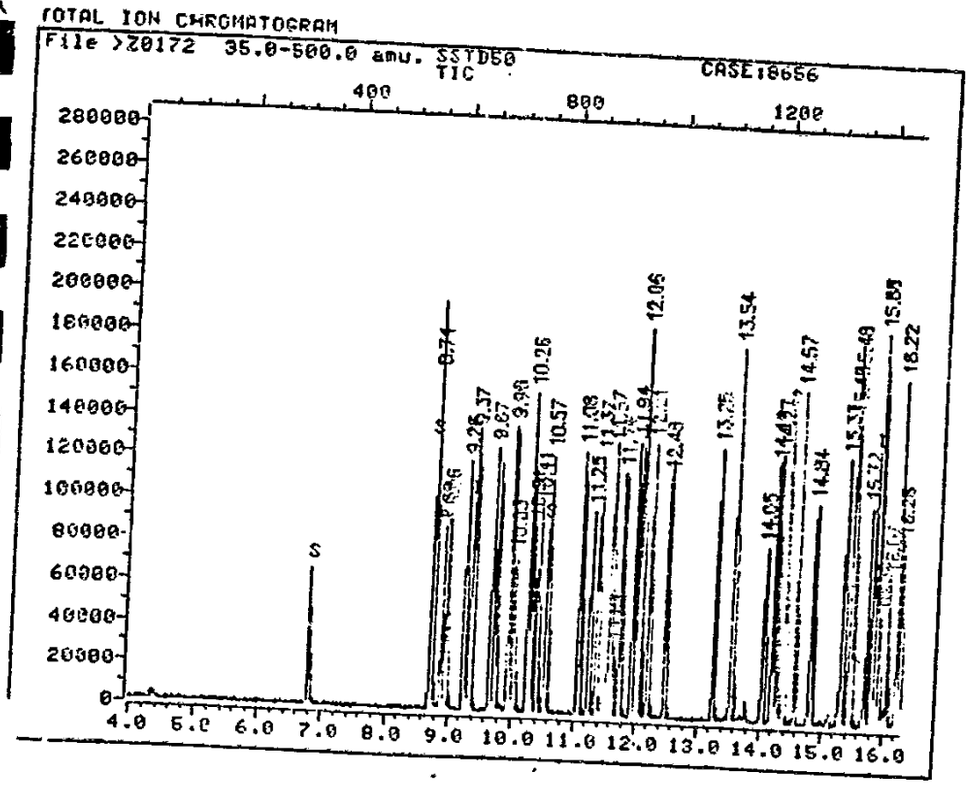
COMPOUND	$\overline{RRF}$	RRF50	%D
DIBENZOFURAN	1.595	1.716	7.6
2,4-DINITROTOLUENE	.457	.530	16.1
DIETHYLPHTHALATE	1.673	1.931	15.4
4-CHLOROPHENYL-PHENYLETHER	.505	.623	23.2
FLUORENE	1.028	1.164	13.3
4-NITROANILINE	.338	.395	16.8
4,6-DINITRO-2-METHYLPHENOL	.187	.163	12.8
N-NITROSODIPHENYLAMINE *	.631	.590	6.5 *
4-BROMOPHENYL-PHENYLETHER	.281	.267	5.0
HEXACHLOROBENZENE	.405	.371	8.4
PENTACHLOROPHENOL *	.207	.194	6.5 *
PHENANTHRENE	1.115	1.130	1.4
ANTHRACENE	1.017	1.082	6.4
DI-N-BUTYLPHTHALATE	1.744	1.852	6.2
FLUORANTHENE *	1.036	1.088	5.1 *
PYRENE	1.401	1.502	7.2
BUTYLBENZYLPHTHALATE	.969	1.086	12.0
3,3'-DICHLOROBENZIDINE	.385	.476	23.5
BENZO(A)ANTHRACENE	1.252	1.307	4.4
CHRYSENE	1.234	1.224	.7
BIS(2-ETHYLHEXYL)PHTHALATE	1.409	1.600	13.6
DI-N-OCTYLPHTHALATE *	2.209	2.352	6.4 *
BENZO(B)FLUORANTHENE	1.149	1.079	6.1
BENZO(K)FLUORANTHENE	.976	1.067	9.3
BENZO(A)PYRENE *	.986	1.051	6.6 *
INDENO(1,2,3-CD)PYRENE	1.075	1.170	8.8
DIBENZ(A,H)ANTHRACENE	.825	.849	2.9
BENZO(G,H,I)PERYLENE	.864	.838	3.0
NITROBENZENE-D5	.463	.473	2.1
2-FLUOROBIPHENYL	1.217	1.190	2.2
TERPHENYL-D14	.947	.897	5.3
PHENOL-D5	1.391	1.426	2.5
2-FLUOROPHENOL	1.319	1.261	4.4
2,4,6-TRIBROMOPHENOL	.287	.282	1.7

(1) Cannot be separated from Diphenylamine

006136

FORM VII SV-2

1/87 Rev.



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Name: SSTD50
Misc: CASE:8656

Quant Output File: ^Z0172::QT

INST: Z

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 23:46

Operator ID: JOHN
Quant Time: 880112 13:39
Injected at: 880112 12:54

TIC page 1 of 3

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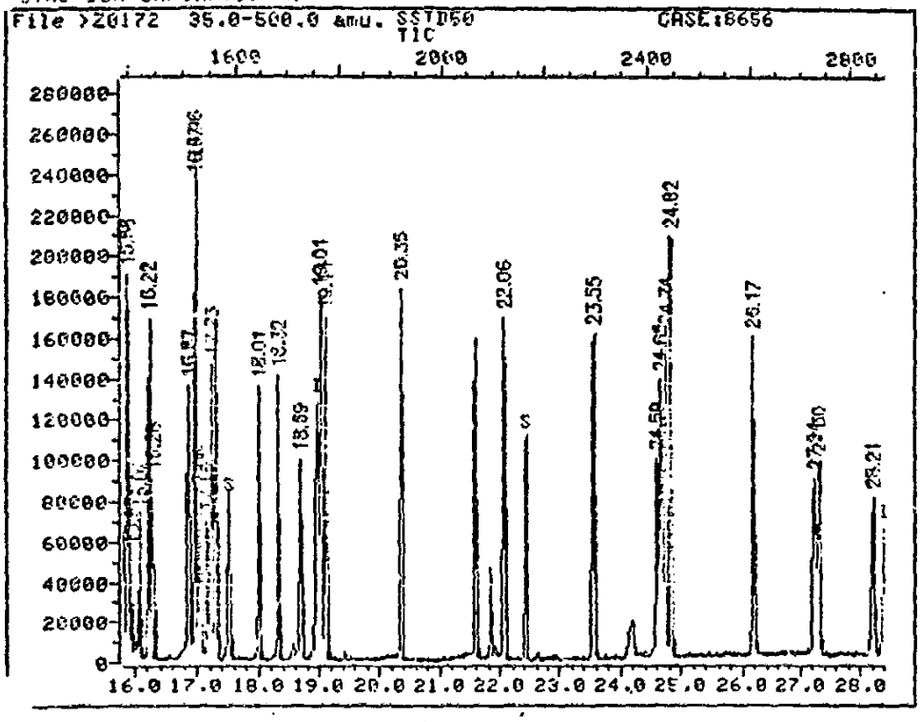
JTAL ION CHROMATOGRAM



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Name: SSTD50
Misc: CASE:8656 INST: Z

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 23:46

Operator ID: JOHN
Quant Time: 880112 13:39
Injected at: 880112 12:54

TIC page 2 of 3

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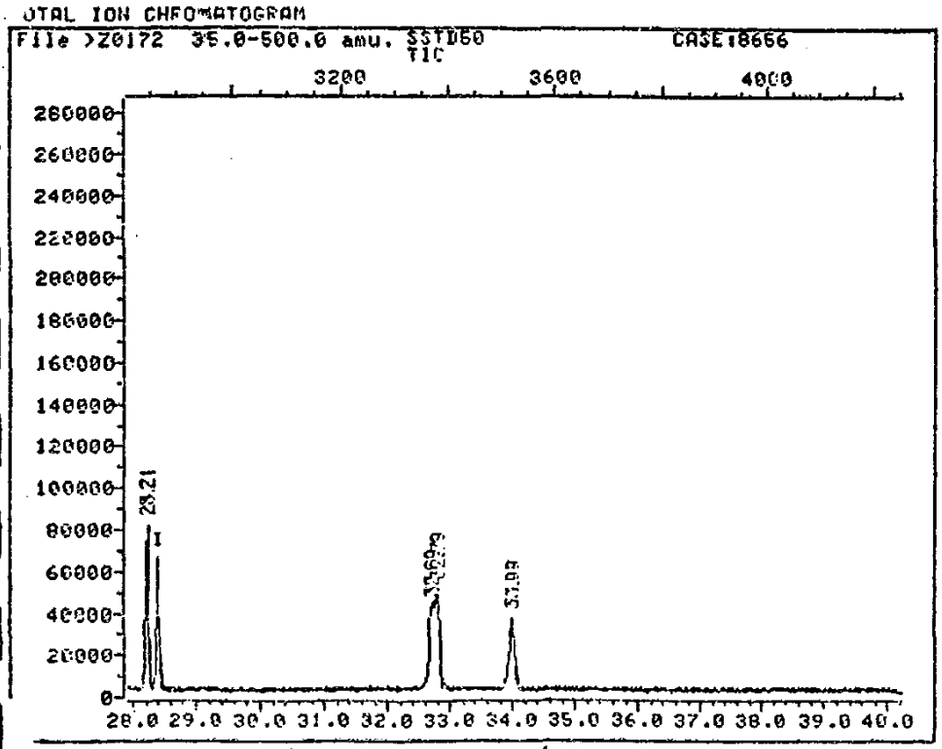
OTAL ION CHROMATOGRAM



Data File: >Z0172::D2 Quant Output File: ^Z0172::QT
Name: SSTD50
Misc: CASE:8656 INST: Z

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 23:46

Operator ID: JOHN
Quant Time: 880112 13:39
Injected at: 880112 12:54

TIC page 3 of 3

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QUANT REPORT

Operator ID: JOHN Quant Rev: 6 Quant Time: 880112 13:39
Output File: ^Z0172::QT Injected at: 880112 12:54
Data File: >Z0172::D2 Dilution Factor: 1.00000
Name: SSTD50
Misc: CASE:8656 INST: Z

ID File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880111 23:46

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-DICHLOROBENZENE-D4	9.33	152.0	33132	40.00	NG/UL	87
2)	PHENOL	8.74	94.0	76566	48.79	NG/UL	85
3)	BIS(2-CHLOROETHYL)ETHER	8.89	93.0	79811M	44.52	NG/UL	
4)	2-CHLOROPHENOL	8.96	128.0	62762	48.73	NG/UL	84
5)	1,3-DICHLOROBENZENE	9.26	146.0	61081	49.21	NG/UL	89
6)	1,4-DICHLOROBENZENE	9.37	146.0	61178	48.95	NG/UL	97
7)	BENZYL ALCOHOL	9.67	108.0	40595	49.97	NG/UL	96
8)	1,2-DICHLOROBENZENE	9.37	146.0	61178	49.07	NG/UL	93
9)	2-METHYLPHENOL	9.96	108.0	56636	50.49	NG/UL	84
10)	BIS(2-CHLOROISOPROPYL)ETHER	10.03	45.0	93942	48.32	NG/UL	98
	4-METHYLPHENOL	10.26	108.0	58740	50.18	NG/UL	95
	N-NITROSO-DI-N-PROPYLAMINE	10.31	70.0	56140M	50.20	NG/UL	
13)	HEXACHLOROETHANE	10.41	117.0	34164M	54.06	NG/UL	
14)	2-FLUOROPHENOL	6.79	112.0	52214M	51.03	NG/UL	
15)	PHENOL-D5	8.71	99.0	59074M	49.97	NG/UL	
16)	*NAPHTHALENE-D8	12.02	136.0	112705	40.00	NG/UL	98
17)	NITROBENZENE	10.57	77.0	79566M	51.03	NG/UL	
18)	ISOPHORONE	11.08	82.0	146159	51.47	NG/UL	91
19)	2-NITROPHENOL	11.25	139.0	33342M	47.07	NG/UL	
20)	2,4-DIMETHYLPHENOL	11.37	107.0	60342	50.48	NG/UL	82
21)	BENZOIC ACID	11.64	122.0	32311M	54.32	NG/UL	
22)	BIS(2-CHLOROETHOXY)METHANE	11.57	93.0	88519	50.59	NG/UL	97
23)	2,4-DICHLOROPHENOL	11.74	162.0	52878	58.49	NG/UL	91
24)	1,2,4-TRICHLOROBENZENE	11.94	180.0	46419	48.63	NG/UL	92
25)	NAPHTHALENE	12.06	128.0	156292	48.17	NG/UL	96
26)	4-CHLOROANILINE	12.21	127.0	55806	51.57	NG/UL	92
27)	HEXACHLOROBUTADIENE	12.48	225.0	29097	47.29	NG/UL	96
28)	4-CHLORO-3-METHYLPHENOL	13.25	107.0	56858	49.56	NG/UL	82
29)	2-METHYLNAPHTHALENE	13.54	142.0	87623	49.95	NG/UL	89
30)	NITROBENZENE-D5	10.53	82.0	66667	52.16	NG/UL	80
31)	*ACENAPHTHENE-D10	15.81	164.0	57561	40.00	NG/UL	95
32)	HEXACHLOROCYCLOPENTADIENE	14.05	237.0	26471	49.82	NG/UL	96
33)	2,4,6-TRICHLOROPHENOL	14.19	196.0	32842M	49.97	NG/UL	88
34)	2,4,5-TRICHLOROPHENOL	14.27	196.0	37088	50.84	NG/UL	89
35)	2-CHLORONAPHTHALENE	14.57	162.0	85263	50.88	NG/UL	92
	2-NITROANILINE	14.84	65.0	53912M	54.38	NG/UL	
	DIMETHYL PHTHALATE	15.33	163.0	109861	52.21	NG/UL	72
38)	ACENAPHTHYLENE	15.48	152.0	145856	51.41	NG/UL	98
39)	2,6-DINITROTOLUENE	15.45	165.0	27452M	50.75	NG/UL	
40)	3-NITROANILINE	15.72	138.0	34406M	51.24	NG/UL	
41)	ACENAPHTHENE	15.88	153.0	92594	51.47	NG/UL	89
42)	2,4-DINITROPHENOL	15.95	184.0	15226M	51.08	NG/UL	
43)	4-NITROPHENOL	16.07	109.0	18628M	53.95	NG/UL	

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	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	DIBENZOFURAN	16.22	168.0	123496	50.66	NG/UL	80
45)	2,4-DINITROTOLUENE	16.28	165.0	38165	54.23	NG/UL	80
46)	DIETHYLPHTHALATE	16.87	149.0	138924	54.97	NG/UL	92
47)	4-CHLOROPHENYL-PHENYLETHER	16.97	204.0	44807	51.88	NG/UL	83
48)	FLUORENE	16.96	166.0	83765	53.35	NG/UL	98
49)	4-NITROANILINE	17.04	138.0	28406	46.50	NG/UL	85
50)	2-FLUOROBIPHENYL	14.38	172.0	85612	49.22	NG/UL	98
51)	2,4,6-TRIBROMOPHENOL	17.50	329.7	20302	46.91	NG/UL	88
52)	*PHENANTHRENE-D10	18.96	188.0	90341	40.00	NG/UL	83
53)	4,6-DINITRO-2-METHYLPHENOL	17.16	198.0	18410	45.63	NG/UL	89
54)	N-NITROSODIPHENYLAMINE	17.23	169.0	66676	50.19	NG/UL	89
55)	4-BROMOPHENYL-PHENYLETHER	18.01	248.0	30103M	48.42	NG/UL	
56)	HEXACHLOROBENZENE	18.32	284.0	41922	48.59	NG/UL	81
57)	PENTACHLOROPHENOL	18.69	266.0	21862	45.91	NG/UL	94
58)	PHENANTHRENE	19.01	178.0	127605	54.34	NG/UL	96
59)	ANTHRACENE	19.11	178.0	122189M	51.53	NG/UL	97
60)	DI-N-BUTYLPHTHALATE	20.35	149.0	209117	55.36	NG/UL	86
61)	FLUORANTHENE	22.06	202.0	122918	58.13	NG/UL	81
62)	*CHRYSENE-D12	24.69	240.0	67173	40.00	NG/UL	97
63)	PYRENE	22.06	202.0	126144M	40.01	NG/UL	91
64)	BUTYLBENZYLPHTHALATE	23.55	149.0	91173M	53.18	NG/UL	
65)	3,3'-DICHLOROBENZIDINE	24.59	252.0	39953	61.07	NG/UL	90
	BENZO(A)ANTHRACENE	24.65	228.0	109757	51.01	NG/UL	91
	CHRYSENE	24.65	228.0	109766	52.18	NG/UL	83
67)	CHRYSENE	24.74	228.0	102812	48.88	NG/UL	89
68)	BIS(2-ETHYLHEXYL)PHTHALATE	24.82	149.0	134328	56.57	NG/UL	80
69)	TERPHENYL-D14	22.42	244.0	75328	43.47	NG/UL	97
70)	*PERYLENE-D12	28.39	264.0	74454	40.00	NG/UL	96
71)	DI-N-OCTYLPHTHALATE	26.17	149.0	218852	57.03	NG/UL	100
72)	BENZO(B)FLUORANTHENE	27.24	252.0	100413	43.34	NG/UL	96
73)	BENZO(K)FLUORANTHENE	27.30	252.0	99301M	55.23	NG/UL	90
74)	BENZO(A)PYRENE	28.21	252.0	97821	50.04	NG/UL	94
75)	INDENO(1,2,3-CD)PYRENE	32.69	276.0	108912	42.85	NG/UL	98
76)	DIBENZ(A,H)ANTHRACENE	32.79	278.0	79033	42.49	NG/UL	94
77)	BENZO(G,H,I)PERYLENE	33.99	276.0	77973M	38.37	NG/UL	87

* Compound is ISTD

006141

006141

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID (Standard): Z0172 Date Analyzed: 1/12/88

Instrument ID: 8704Z Time Analyzed: 12:54

	IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
12 HOUR STD	33132.	9.33	112705.	12.02	57561.	15.81
UPPER LIMIT	66264.	9.83	225410.	12.52	115122.	16.31
LOWER LIMIT	16566.	8.83	56353.	11.52	28781.	15.31
EPA SAMPLE NO.						
1 SBLK1	32890.	9.33	113620.	12.00	60624.	15.79
2 FD732	35833.	9.39	121289.	12.05	62946.	15.85
3 FD732MS	34948.	9.41	125665.	12.18	65923.	16.07
4 FD732MSD	37149.	9.33	128064.	12.03	66500.	15.85
5 FD733	37158.	9.37	127552.	12.05	65760.	15.84
6 SBLK2	37203.	9.37	129835.	12.05	63820.	15.84
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
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

FORM VIII SV-1 118 1/87 Rev.

006142

006142

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab File ID (Standard): Z0172 Date Analyzed: 1/12/88

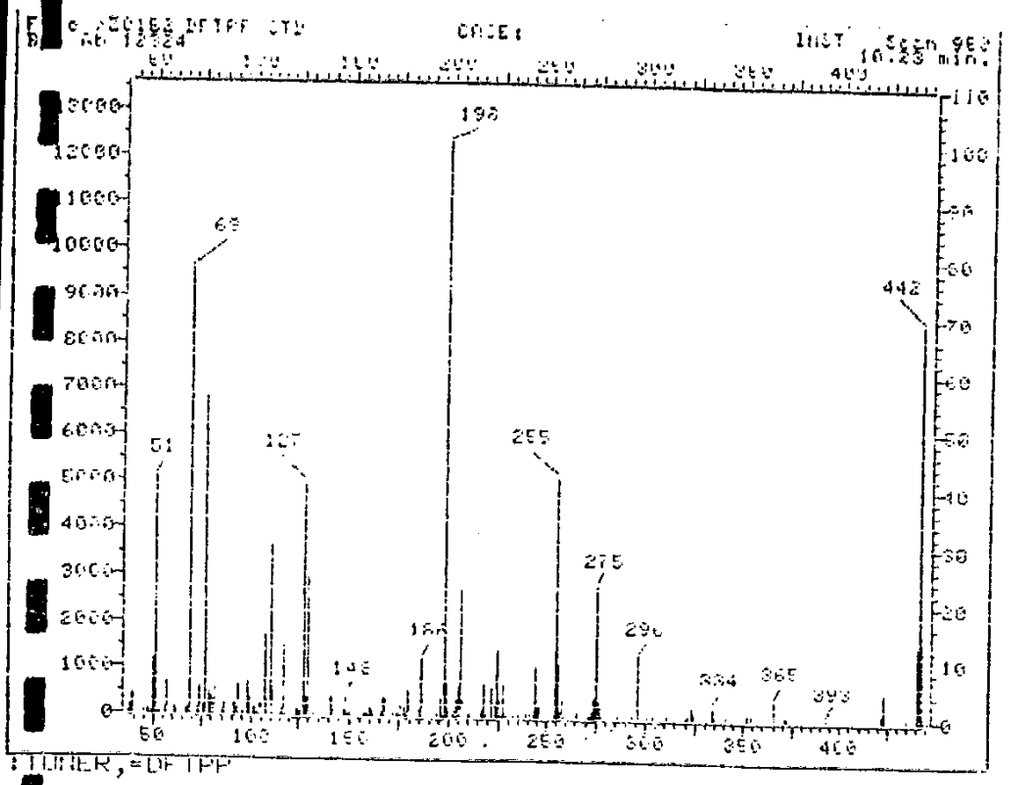
Instrument ID: 8704Z Time Analyzed: 12:54

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	90341.	18.96	67173.	24.69	74454.	28.39
	UPPER LIMIT	180682.	19.46	134346.	25.19	148908.	28.89
	LOWER LIMIT	45171.	18.46	33587.	24.19	37227.	27.89
	EPA SAMPLE NO.						
1	SBLK1	90785.	18.94	71102.	24.66	77629.	28.37
2	FD732	100054.	19.00	59685.	24.72	64389.	28.46
3	FD732MS	99534.	19.22	57746.	25.00	61304.	29.12
4	FD732MSD	102136.	19.01	52671.	24.73	49363.	28.45
5	FD733	94094.	19.00	54379.	24.73	50437.	28.46
6	SBLK2	96887.	19.00	58776.	24.72	54152.	28.44
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = PHENANTHRENE-D10
IS5 (CRY) = CHRYSENE-D12
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



GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	41.26	41.26	OK
68	Less than 2% of mass 69	1.14	1.46	OK
69	(reference only)	77.59	77.59	OK
70	Less than 2% of mass 69	.27	.35	OK
127	40-60% of mass 198	40.04	40.04	OK
197	Less than 1% of mass 198	.39	.39	OK
198	Base peak, 100% relative abundance	100.00	100.00	OK
199	5-9% of mass 198	5.87	5.87	OK
275	10-30% of mass 198	22.66	22.66	OK
365	Greater than 1% of mass 198	3.32	3.32	OK
441	0-100% of mass 443	93.02	93.42	OK
442	Greater than 40% of mass 198	69.08	69.08	OK
443	17-23% of mass 442	13.94	20.18	OK

Injection Date: 01/11/88
Injection Time: 09:37
Data File: >20152
Scan: 958

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006144

006144

>[redacted]0152 DFTPP STD CASE: INST:2 INT

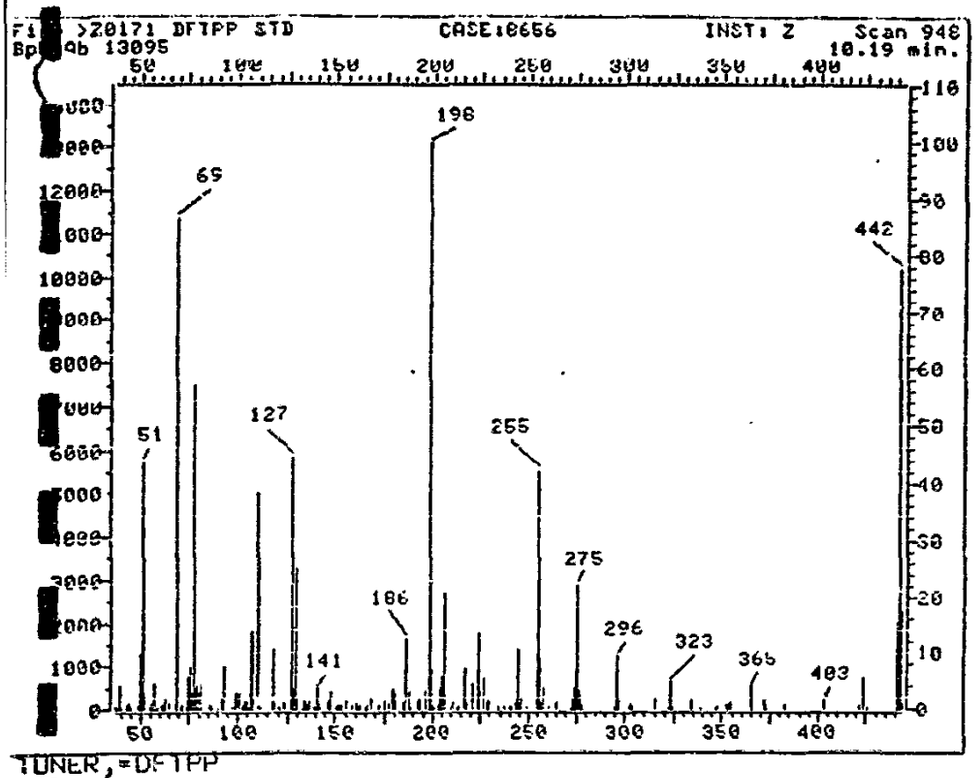
[redacted] 950

[redacted]le: >20152 Scan #: 950 Retn. time: 10.23

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
[redacted]7.05	26.0	93.05	612.0	150.25	77.0	204.15	339.0	272.15	40.0
[redacted]8.05	153.0	95.25	47.0	151.15	42.0	205.15	627.0	272.50	29.0
39.20	437.0	96.15	50.0	151.50	71.0	206.25	2740.0	273.25	140.0
[redacted]1.30	44.0	98.15	727.0	153.15	145.0	207.15	334.0	274.25	424.0
[redacted]3.45	23.0	99.00	317.0	157.00	49.0	210.20	61.0	275.25	2793.0
45.40	44.0	101.15	280.0	157.40	55.0	211.05	110.0	276.15	335.0
[redacted]7.65	71.0	102.40	115.0	158.05	62.0	216.20	123.0	277.25	245.0
[redacted]8.50	66.0	102.90	63.0	159.05	52.0	217.20	662.0	278.15	64.0
49.40	45.0	103.15	68.0	160.20	163.0	218.45	60.0	286.45	31.0
50.15	1162.0	104.15	191.0	161.20	127.0	221.15	584.0	289.80	11.0
[redacted]1.15	5085.0	105.00	195.0	162.05	80.0	223.25	244.0	293.30	33.0
[redacted]2.15	99.0	107.15	1718.0	166.20	88.0	224.15	1416.0	296.15	1311.0
53.50	147.0	108.05	300.0	167.20	364.0	225.15	315.0	301.25	24.0
[redacted].25	37.0	110.05	3664.0	167.95	324.0	226.40	36.0	304.15	30.0
[redacted] 15	142.0	111.05	600.0	169.20	45.0	227.15	682.0	310.45	32.0
57.15	664.0	112.30	67.0	171.65	44.0	228.00	98.0	320.30	17.0
61.05	134.0	113.05	68.0	172.00	81.0	229.15	182.0	321.00	60.0
[redacted]2.05	79.0	114.95	13.0	173.15	63.0	232.70	49.0	323.25	249.0
[redacted]3.95	19.0	116.20	148.0	174.15	79.0	233.05	16.0	324.25	77.0
67.05	58.0	117.20	1510.0	175.25	200.0	233.45	23.0	334.20	255.0
[redacted]7.30	70.0	118.20	132.0	177.25	171.0	235.05	79.0	335.20	50.0
[redacted]8.05	140.0	120.15	42.0	178.15	87.0	239.45	30.0	341.20	48.0
69.05	9562.0	123.25	118.0	179.15	560.0	241.20	57.0	352.15	98.0
[redacted]0.00	33.0	124.15	90.0	180.25	260.0	243.20	53.0	353.25	50.0
[redacted]3.15	109.0	125.15	73.0	183.30	20.0	244.20	1068.0	365.05	409.0
74.00	567.0	126.00	56.0	185.20	111.0	245.20	227.0	371.15	30.0
76.00	181.0	127.15	4934.0	186.20	1233.0	246.15	224.0	372.15	51.0
[redacted]7.15	6769.0	128.15	430.0	189.20	163.0	250.75	20.0	392.80	23.0
[redacted]8.15	440.0	129.15	2930.0	194.05	40.0	254.15	39.0	422.15	117.0
79.15	373.0	132.15	31.0	196.15	337.0	255.15	5099.0	423.15	590.0
[redacted]0.15	312.0	134.05	100.0	196.90	48.0	256.25	1134.0	434.95	35.0
[redacted]1.15	543.0	141.20	378.0	198.15	12324.0	257.25	123.0	435.30	19.0
85.20	82.0	141.95	74.0	199.15	724.0	258.20	572.0	441.20	1605.0
86.05	192.0	142.20	78.0	200.15	108.0	259.20	137.0	442.20	8513.0
[redacted]7.05	89.0	145.00	24.0	201.65	27.0	259.95	15.0	443.20	1718.0
[redacted]7.80	20.0	147.25	113.0	202.15	34.0	265.20	80.0	444.20	135.0
91.05	220.0	148.15	399.0	203.15	121.0	271.15	21.0	445.80	24.0
[redacted]2.20	110.0	148.90	53.0						

006145

006145



GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphosphine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	Appropriate Peak	Status
51	30-60% of mass 198	43.73	43.73	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	86.77	86.77	Ok
70	Less than 2% of mass 69	.31	.36	Ok
127	40-60% of mass 198	44.41	44.41	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	7.06	7.06	Ok
275	10-30% of mass 198	21.97	21.97	Ok
365	Greater than 1% of mass 198	3.96	3.96	Ok
441	0-100% of mass 443	15.40	87.47	Ok
442	Greater than 40% of mass 198	77.59	77.59	Ok
443	17-23% of mass 442	17.61	22.69	Ok

Injection Date: 01/12/88
Injection Time: 11:51
Data File: >Z0171
Scan: 948

006146

:AB

.171 DHIPP STD CASE:8656 INST: Z
948

File: >Z0171 Scan #: 948 Retn. time: 10.19

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
37.05	53.0	82.00	179.0	141.05	471.0	204.15	480.0	276.25	442.0
38.05	68.0	86.05	87.0	142.05	143.0	205.15	737.0	277.25	296.0
39.05	534.0	87.30	35.0	142.95	68.0	206.25	2666.0	278.25	94.0
39.80	67.0	90.20	10.0	147.15	190.0	207.15	315.0	295.30	41.0
40.70	66.0	92.05	213.0	148.15	403.0	209.95	44.0	296.15	1225.0
43.05	92.0	93.05	925.0	150.25	42.0	211.05	149.0	297.15	219.0
44.30	135.0	96.50	31.0	151.90	76.0	213.20	10.0	302.40	20.0
45.15	62.0	99.15	342.0	152.40	78.0	213.70	32.0	303.15	112.0
45.65	63.0	101.00	343.0	153.25	86.0	217.05	948.0	303.75	30.0
49.40	105.0	103.25	83.0	155.15	201.0	218.05	156.0	304.00	33.0
50.15	1310.0	104.15	191.0	157.95	106.0	221.00	581.0	315.20	211.0
51.15	5726.0	105.25	165.0	160.05	128.0	224.15	1756.0	322.15	22.0
52.15	292.0	106.00	35.0	161.05	46.0	225.15	401.0	323.15	599.0
55.25	67.0	107.15	1790.0	162.20	82.0	227.15	693.0	324.00	29.0
56.15	143.0	108.20	216.0	165.05	54.0	228.15	186.0	324.25	29.0
57.15	592.0	110.05	5017.0	166.05	105.0	229.15	160.0	334.05	165.0
58.45	16.0	112.05	101.0	168.20	233.0	234.05	31.0	339.20	18.0
.80	28.0	117.05	1379.0	172.00	96.0	237.05	47.0	346.15	25.0
60.70	85.0	118.20	116.0	175.15	195.0	240.05	29.0	347.15	69.0
62.05	86.0	120.65	31.0	177.15	148.0	241.05	61.0	352.00	82.0
63.20	211.0	121.15	22.0	179.25	429.0	243.20	117.0	353.40	98.0
65.20	150.0	123.15	155.0	180.15	336.0	244.20	1346.0	354.25	146.0
69.05	11362.0	127.15	5815.0	181.15	174.0	245.05	124.0	365.05	519.0
70.40	41.0	128.15	458.0	185.20	201.0	246.15	273.0	372.15	202.0
71.40	64.0	129.15	3273.0	186.20	1632.0	249.15	37.0	373.00	19.0
71.65	72.0	130.15	235.0	187.20	397.0	255.15	5549.0	383.00	91.0
73.25	64.0	133.05	16.0	188.20	69.0	256.25	1170.0	403.00	171.0
74.15	752.0	134.05	165.0	192.05	165.0	257.25	129.0	422.15	103.0
75.15	955.0	135.05	124.0	193.20	246.0	258.05	486.0	423.15	728.0
76.15	337.0	135.95	90.0	196.15	392.0	261.05	39.0	425.90	30.0
77.15	7460.0	137.05	183.0	198.00	13095.0	265.05	130.0	441.20	2017.0
78.15	508.0	138.70	21.0	199.15	924.0	272.15	18.0	442.20	10161.0
79.15	573.0	139.20	35.0	200.15	91.0	273.15	223.0	443.20	2306.0
80.00	338.0	139.55	54.0	201.65	51.0	274.15	504.0	444.20	142.0
81.15	561.0	139.80	51.0	203.00	89.0	275.25	2877.0		

006147

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0173

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	10.	U
111-44-4	BIS(2-CHLOROETHYL)ETHER	10.	U
95-57-8	2-CHLOROPHENOL	10.	U
541-73-1	1,3-DICHLOROBENZENE	10.	U
106-46-7	1,4-DICHLOROBENZENE	10.	U
100-51-6	BENZYL ALCOHOL	10.	U
95-50-1	1,2-DICHLOROBENZENE	10.	U
95-48-7	2-METHYLPHENOL	10.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	10.	U
106-44-5	4-METHYLPHENOL	10.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	10.	U
67-72-1	HEXACHLOROETHANE	10.	U
98-95-3	NITROBENZENE	10.	U
78-59-1	ISOPHORONE	10.	U
88-75-5	2-NITROPHENOL	10.	U
105-67-9	2,4-DIMETHYLPHENOL	10.	U
65-85-0	BENZOIC ACID	50.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	10.	U
120-83-2	2,4-DICHLOROPHENOL	10.	U
120-82-1	1,2,4-TRICHLOROBENZENE	10.	U
91-20-3	NAPHTHALENE	10.	U
106-47-8	4-CHLOROANILINE	10.	U
87-68-3	HEXACHLOROBUTADIENE	10.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	10.	U
91-57-6	2-METHYLNAPHTHALENE	10.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	10.	U
88-06-2	2,4,6-TRICHLOROPHENOL	10.	U
95-95-4	2,4,5-TRICHLOROPHENOL	10.	U
91-58-7	2-CHLORONAPHTHALENE	10.	U
88-74-4	2-NITROANILINE	50.	U
131-11-3	DIMETHYL PHTHALATE	10.	U
208-96-8	ACENAPHTHYLENE	10.	U
606-20-2	2,6-DINITROTOLUENE	10.	U

006148

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK1

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0173

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-NITROANILINE	10.	U
83-32-9	ACENAPHTHENE	10.	U
51-28-5	2,4-DINITROPHENOL	50.	U
100-02-7	4-NITROPHENOL	50.	U
132-64-9	DIBENZOFURAN	10.	U
121-14-2	2,4-DINITROTOLUENE	10.	U
84-66-2	DIETHYLPHTHALATE	10.	U
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	10.	U
86-73-7	FLUORENE	10.	U
100-01-6	4-NITROANILINE	50.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50.	U
86-30-6	N-NITROSODIPHENYLAMINE	10.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	10.	U
118-74-1	HEXACHLOROBENZENE	10.	U
87-86-5	PENTACHLOROPHENOL	50.	U
85-01-8	PHENANTHRENE	10.	U
120-12-7	ANTHRACENE	10.	U
84-74-2	DI-N-BUTYLPHTHALATE	10.	U
206-44-0	FLUORANTHENE	10.	U
129-00-0	PYRENE	10.	U
85-68-7	BUTYLBENZYLPHTHALATE	10.	U
91-94-1	3,3'-DICHLOROBENZIDINE	20.	U
56-55-3	BENZO(A)ANTHRACENE	10.	U
218-01-9	CHRYSENE	10.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10.	U
117-84-0	DI-N-OCTYLPHTHALATE	10.	U
205-99-2	BENZO(B)FLUORANTHENE	10.	U
207-08-9	BENZO(K)FLUORANTHENE	10.	U
50-32-8	BENZO(A)PYRENE	10.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	10.	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	U

(1) - Cannot be separated from diphenylamine

006149

FORM I SV-2 1/87 Rev.

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK1

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0173

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	13.66	3.	J
2. - -	UNKNOWN	13.85	4.	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
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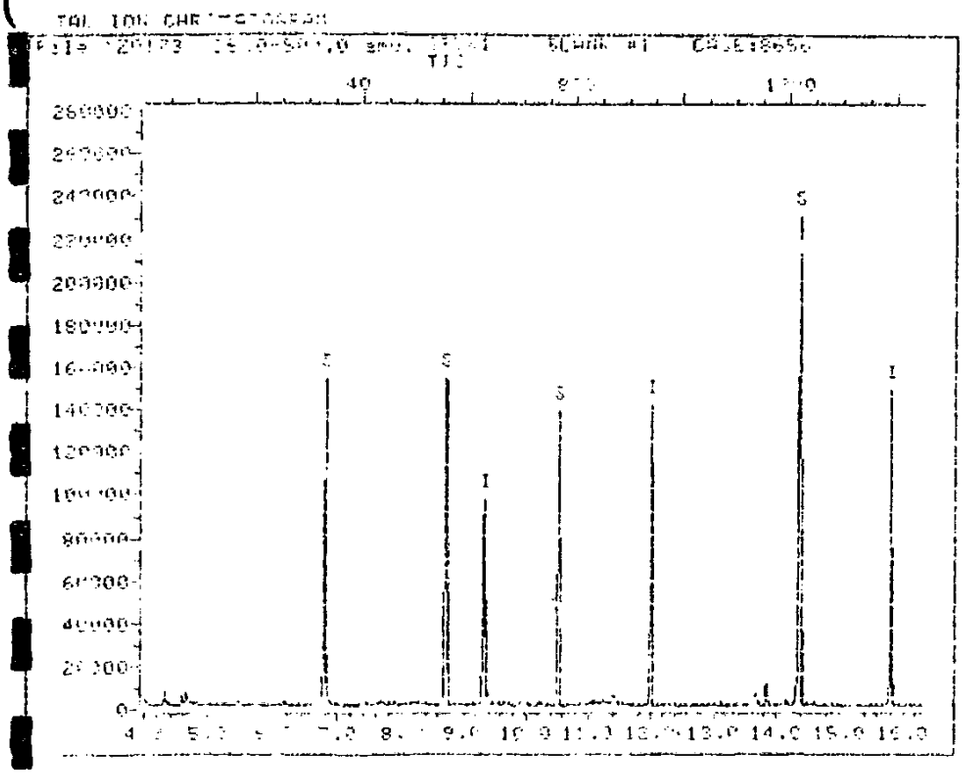
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

006150

FORM I SV-TIC 1/87 Rev.



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Name: [illegible] PLANE #1
Misc: CASE:8656 INST: Z

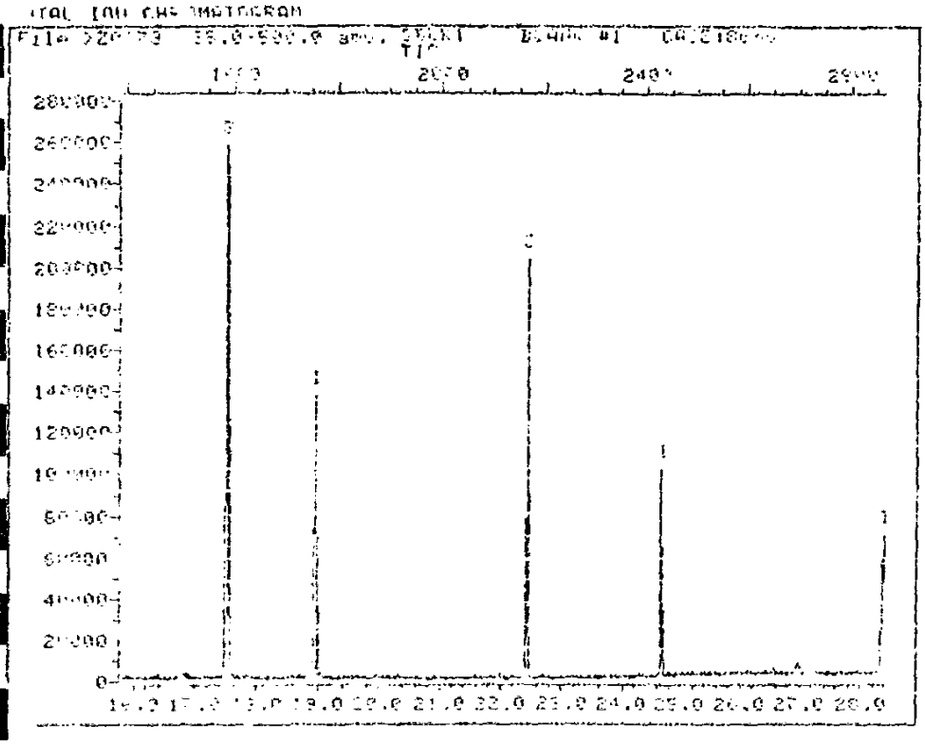
Id File: I_[illegible]::[illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) GAS
Last Calibration: 880112 14:07

Operator ID: JOHN
Quant Time: 880112 14:5[illegible]
Injected at: 880112 14:10

TIC page 1 of 3

006151

TOTAL ION CHROMATOGRAM



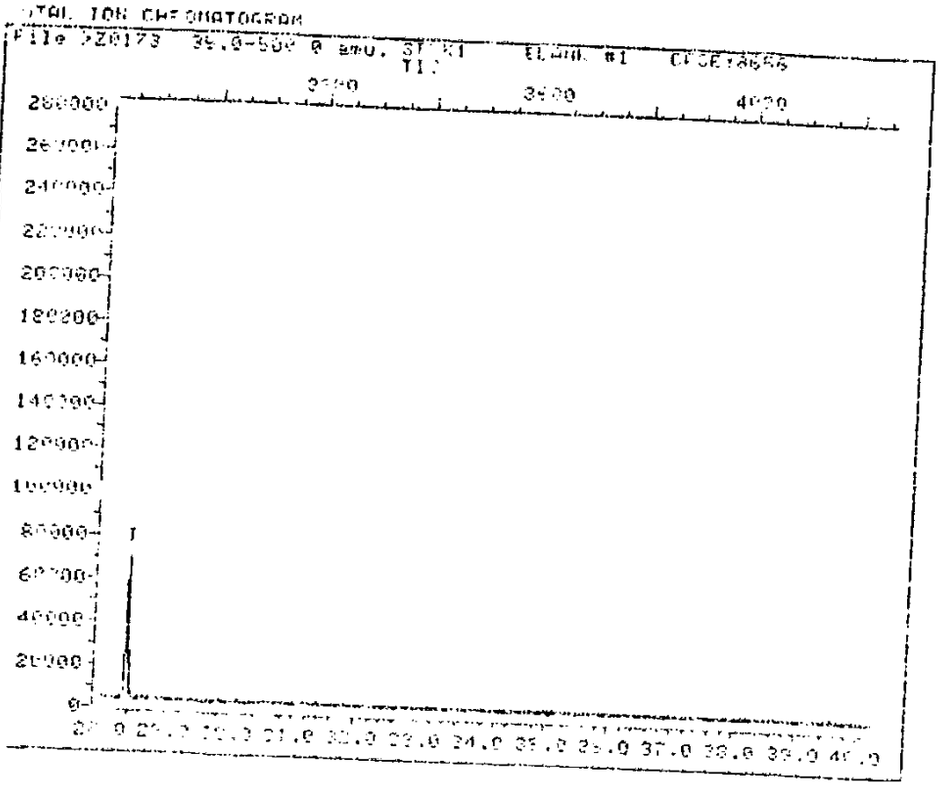
Data File: >Z0173::L2 Quant Output File: Z0173::QT
Name: SPLIT BLANK #1
Misc: CASE:8676 INST: Z

IM File: IM_BN.::S
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) GAS
Last Calibration: 890112 14:07

Operator ID: JOHN
Quant Time: 890112 14:58
Injected at: 890112 14:10

TIC page 2 of 3

006152



Data File: [illegible]::L2 Quant Output File: [illegible]
Name: SBL[illegible]1 BL[illegible]K #1
Misc: [illegible] INST: Z

Id File: :D_[illegible]2::S[illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (E[illegible]
Last Calibration: 890112 14:[illegible]

Operator ID: JOHN
Quant Time: 890112 14:58
Injected at: 890112 14:10

TIC page 3 of 3

006153

QUANT REPORT

Operator ID: [illegible] Quant Rev: 6 Quant Time: 890112 14:58
Output File: [illegible] Injected at: 890112 14:10
Data File: [illegible] Dilution Factor: 1.00000
Name: [illegible]
Misc: CASE:[illegible] INST: Z

ID File: IC_BN[illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 890112 14:07

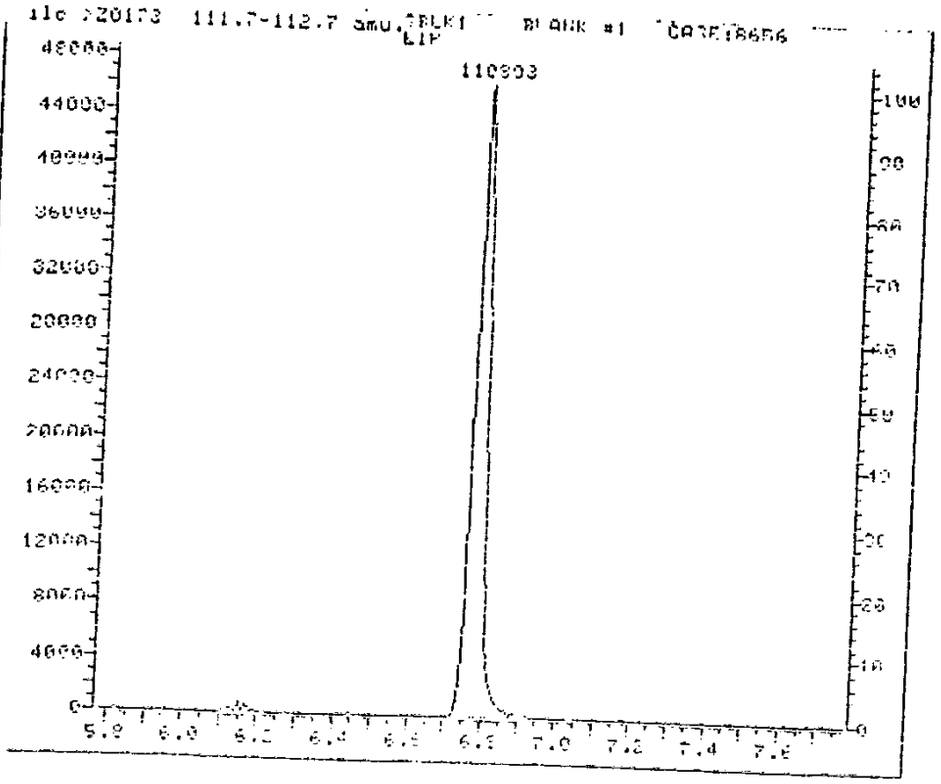
	Compound	R.T.	Q ion	Area	Conc	Unit:	[illegible]
[illegible]	*1,4-DICHLOROBENZENE-D4	9.33	15[illegible].0	[illegible]	40.00	NG/UL	[illegible]
[illegible]	2-FLUOROPHENOL	6.78	112.0	11[illegible]	106.39	NG/UL	
15)	PHENOL-D5	8.71	9[illegible].0	1008[illegible]	8[illegible].0[illegible]	NG/UL	
1[illegible]	*NAPHTHALENE D8	12.00	136.0	1136[illegible]	40.00	NG/UL	99
3[illegible]	NITROBENZENE-D5	10.5[illegible]	8[illegible].0	9[illegible]	69.32	NG/UL	82
31)	*ACENAPHTHENE D10	15.79	164.0	60[illegible]	40.00	NG/UL	94
[illegible]	2-FLUOROPHENOL	14.37	17[illegible].0	14[illegible]	78.73	NG/UL	[illegible]
[illegible]	2,4,6-TRIBROMOPHENOL	17.50	[illegible]29.7	[illegible]	185.08	NG/UL	93
[illegible]	*PHENANTHRENE D10	18.94	18[illegible].0	[illegible]	40.00	NG/UL	94
62)	*CHRYSENE D12	24.6[illegible]	24[illegible].0	[illegible]	40.00	NG/UL	[illegible]
[illegible]	TERPHENYL-D14	22.4[illegible]	24[illegible].0	1430[illegible]	8[illegible].71	NG/UL	[illegible]
7[illegible]	*PERYLENE D12	28.37	264.0	776[illegible]	40.00	NG/UL	[illegible]

Compound is [illegible]

006154

C 130

006154



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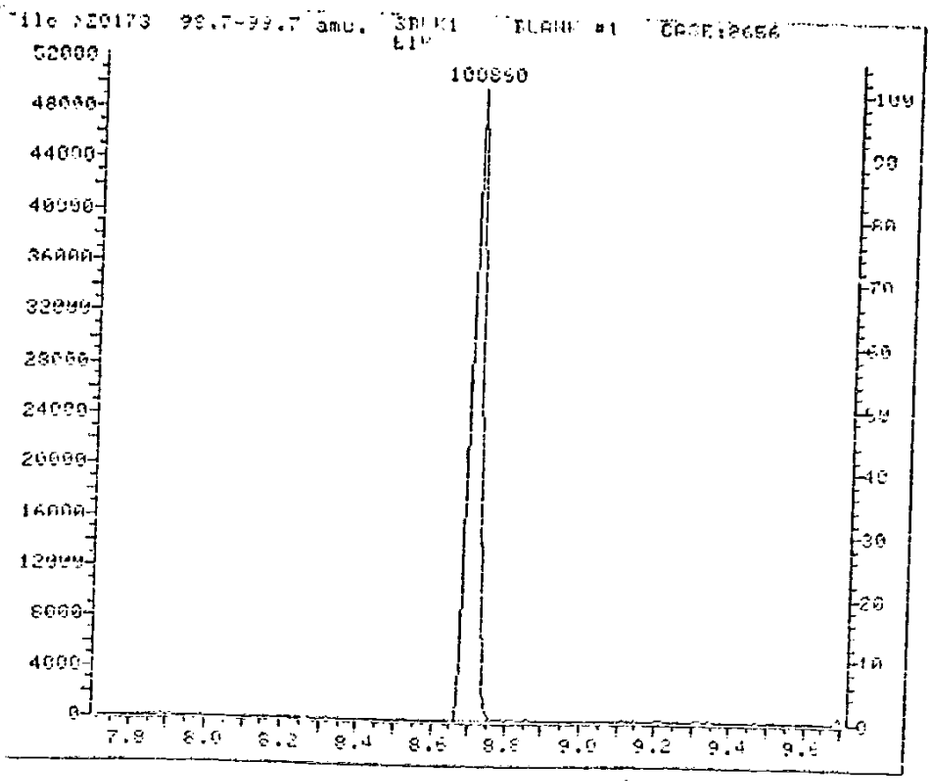
Name: SBLK1 BLANK #1
Misc: CASE:8656 INST: 2
Quant Time: 880112 14:58
Injected at: 880112 14:10

Quant Output File: >Z0173::U1
Quant ID File: ID_BN2::EX
Last Calibration: 880112 14:0

Compound No: 14
Compound Name: 2-FLUOROPHENOL
Scan Number: 329
Retention Time: 6.20 min.
Quant Ion: 112.0
Area: 110803M
Concentration: 106.89 NG/UL

This report was produced by QAPEA on: 880112 15:17

006155



Data File: >20173::L2 Quant Output File: ^20173::U1
Name: SBLK1 BLANK #1
Misc: CASE:8656 INST: 2
Quant Time: 880112 14:58 Quant ID File: ID_BN2::EX
Injected at: 880112 14:10 Last Calibration: 880112 14:0

Compound No: 15
Compound Name: PHENOL-D5
Scan Number: 555
Retention time: 8.71 min.
Quant Ion: 99.0
Area: 1008680
Concentration: 86.00 NG/UL

This report was produced by WAKEA on: 880112 15:18

006156

132

Mendata file header from : >20173

Sample: SBCK1 BLANK # Operator: JOHN MS 1/12/88 14:10
Misc : CASE:8656 INST: Z
Ins. #: 4 MS model: 8 SYMH rev.: 1A ACS # : 1
Method file: #4PNA Tuning file: #4TUNE No. of extra records: 2
Source temp.: 200 Analyzer temp.: 0 Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

20173 SBCK1 BLANK # CASE:8656 INST: Z
35.01 500.0 CLP ADC TIC
Envelope: 1.0 Area Reject: 19764. Max Peaks: 2 Enriching: 1
Envelope: 0.00 Results File 120173 Sorted by Time Area INT

Peak	R.T. min.	First scan	Max scan	Last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	13.66	1133	1176	1[illegible]5	5398	27094	20[illegible]	[illegible]	[illegible]
2	13.8[illegible]	[illegible]	1159	1164	10664	2[illegible]	2[illegible]	[illegible]	[illegible]

Sum of corrected areas: [illegible]

Summary of Unknowns RPM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	40.0	197674.	9.33	3.99 - 1[illegible]
2	40.0	252424.	12.00	10.67 - 1[illegible]
3	40.0	277910.	15.2[illegible]	13.90 - 1[illegible]
4	40.0	266[illegible]18.	18.94	1[illegible].37 - 21.50
5	40.0	2[illegible]7964.	24.6[illegible]	21.80 - 2[illegible]
6	40.0	23[illegible]10.	28.[illegible]	26.51 - 40.27

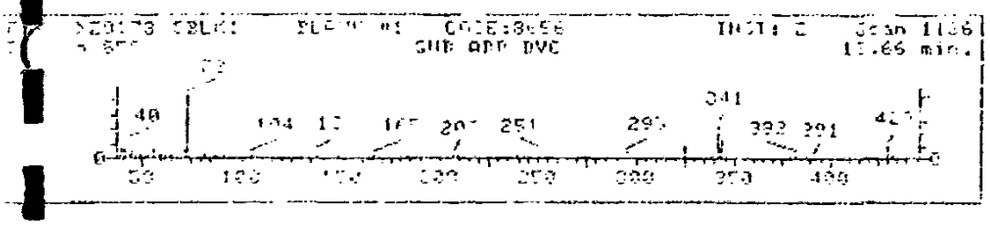
Dilution Factor (DF) = 1.00 Fractional Solid (FS) = 1.00
Amount Method (AM) = 1000.00 Amount Used (AU) = 1000.00

Correction Factor = 1.00 = (AM / AU) / (DF * FS)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std}}{\text{Area Int Std}} * \text{Area Unk} * \text{Correction Factor}$$

9:28 PM TUE., 12 JAN., 1988

006157



006158

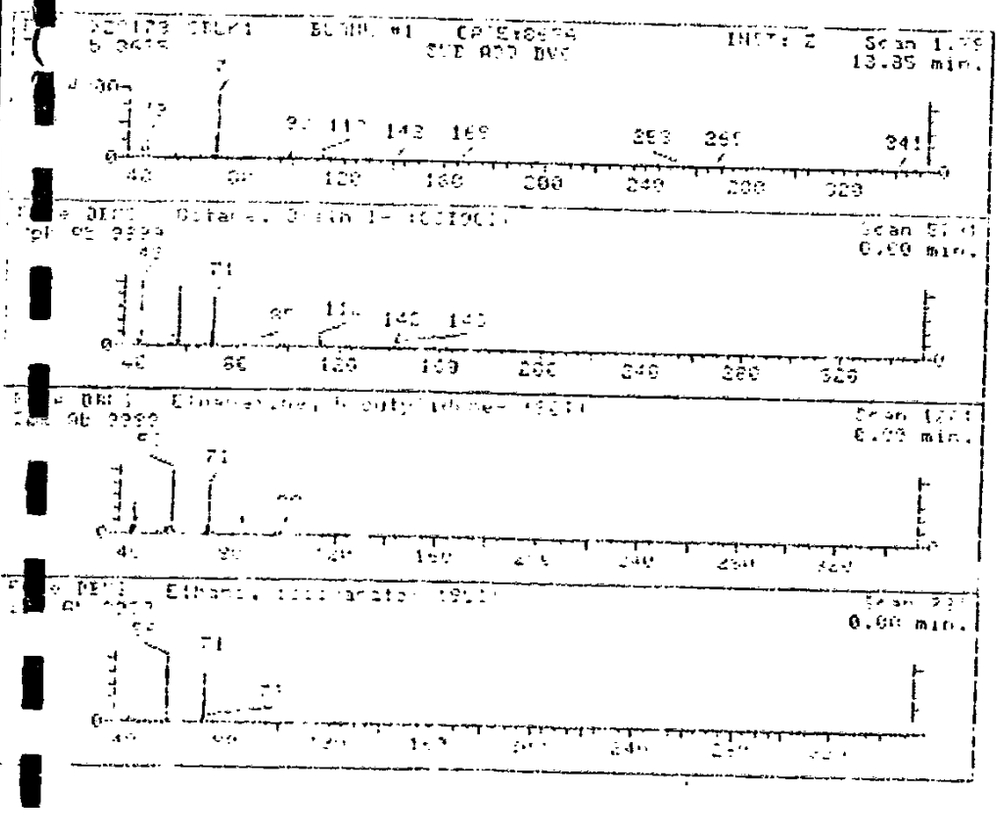
Unknown

Unknown #
Area = 2058[illegible].00 Tentative Concentration is [illegible] 00

Sample Type: [illegible] Spectrum #: 1[illegible]36

No data base entries were retrieved.

134



Unknown #.

Area = 27951.00 Tentative Concentration is 4.00

1. Octane, 3-ethyl- (8CI9CI)
2. Ethanamine, N-butylidene- (9CI)
3. Ethane, isocyanato- (9CI)
4. 2,6-Octadiene-4,5-diol (8CI9CI)

142 C [illegible]
99 [illegible]
71 [illegible]
142 [illegible]

Sample [illegible] Spectrum #: 1 [illegible]
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob	CAS #	CCI #	PROT	K	C	#	LG	[illegible]	%	C_N	C_I	A_IN
1.	52*	5881174	3767	DBMS	25	63	3	0	174	16	20	13
2.	52*	1611127	3699	DBMS	23.	[illegible]	3	0	131	[illegible]	21	12
3.	32*	109900	3673	DBMS	31	42	2	0	115	[illegible]	12	15
	32*	4486593	3777	DBMS	31	43	2	0	109	[illegible]	12	15

006159

006159

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0181

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	10.	U
111-44-4	BIS(2-CHLOROETHYL)ETHER	10.	U
95-57-8	2-CHLOROPHENOL	10.	U
541-73-1	1,3-DICHLOROBENZENE	10.	U
106-46-7	1,4-DICHLOROBENZENE	10.	U
100-51-6	BENZYL ALCOHOL	10.	U
95-50-1	1,2-DICHLOROBENZENE	10.	U
95-48-7	2-METHYLPHENOL	10.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	10.	U
106-44-5	4-METHYLPHENOL	10.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	10.	U
67-72-1	HEXACHLOROETHANE	10.	U
98-95-3	NITROBENZENE	10.	U
78-59-1	ISOPHORONE	10.	U
88-75-5	2-NITROPHENOL	10.	U
105-67-9	2,4-DIMETHYLPHENOL	10.	U
65-85-0	BENZOIC ACID	50.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	10.	U
120-83-2	2,4-DICHLOROPHENOL	10.	U
120-82-1	1,2,4-TRICHLOROBENZENE	10.	U
91-20-3	NAPHTHALENE	10.	U
106-47-8	4-CHLOROANILINE	10.	U
87-68-3	HEXACHLOROBUTADIENE	10.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	10.	U
91-57-6	2-METHYLNAPHTHALENE	10.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	10.	U
88-06-2	2,4,6-TRICHLOROPHENOL	10.	U
95-95-4	2,4,5-TRICHLOROPHENOL	10.	U
91-58-7	2-CHLORONAPHTHALENE	10.	U
88-74-4	2-NITROANILINE	50.	U
131-11-3	DIMETHYL PHTHALATE	10.	U
208-96-8	ACENAPHTHYLENE	10.	U
606-20-2	2,6-DINITROTOLUENE	10.	U

006160

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK2

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0181

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-NITROANILINE	10.	U
83-32-9	ACENAPHTHENE	10.	U
51-28-5	2,4-DINITROPHENOL	50.	U
100-02-7	4-NITROPHENOL	50.	U
132-64-9	DIBENZOFURAN	10.	U
121-14-2	2,4-DINITROTOLUENE	10.	U
84-66-2	DIETHYLPHTHALATE	10.	U
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	10.	U
86-73-7	FLUORENE	10.	U
100-01-6	4-NITROANILINE	50.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	50.	U
86-30-6	N-NITROSODIPHENYLAMINE	10.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	10.	U
118-74-1	HEXACHLOROBENZENE	10.	U
87-86-5	PENTACHLOROPHENOL	50.	U
85-01-8	PHENANTHRENE	10.	U
120-12-7	ANTHRACENE	10.	U
84-74-2	DI-N-BUTYLPHTHALATE	10.	U
206-44-0	FLUORANTHENE	10.	U
129-00-0	PYRENE	10.	U
85-68-7	BUTYLBENZYLPHTHALATE	10.	U
91-94-1	3,3'-DICHLOROBENZIDINE	20.	U
56-55-3	BENZO(A)ANTHRACENE	10.	U
218-01-9	CHRYSENE	10.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	10.	U
117-84-0	DI-N-OCTYLPHTHALATE	10.	U
205-99-2	BENZO(B)FLUORANTHENE	10.	U
207-08-9	BENZO(K)FLUORANTHENE	10.	U
50-32-8	BENZO(A)PYRENE	10.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	10.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	10.	U
191-24-2	BENZO(G,H,I)PERYLENE	10.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

006161

006161

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK2

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1000. (g/mL) ML Lab File ID: Z0181

Level: (low/med) LOW Date Received: 0/ 0/ 0

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00

Number TICs found: 4

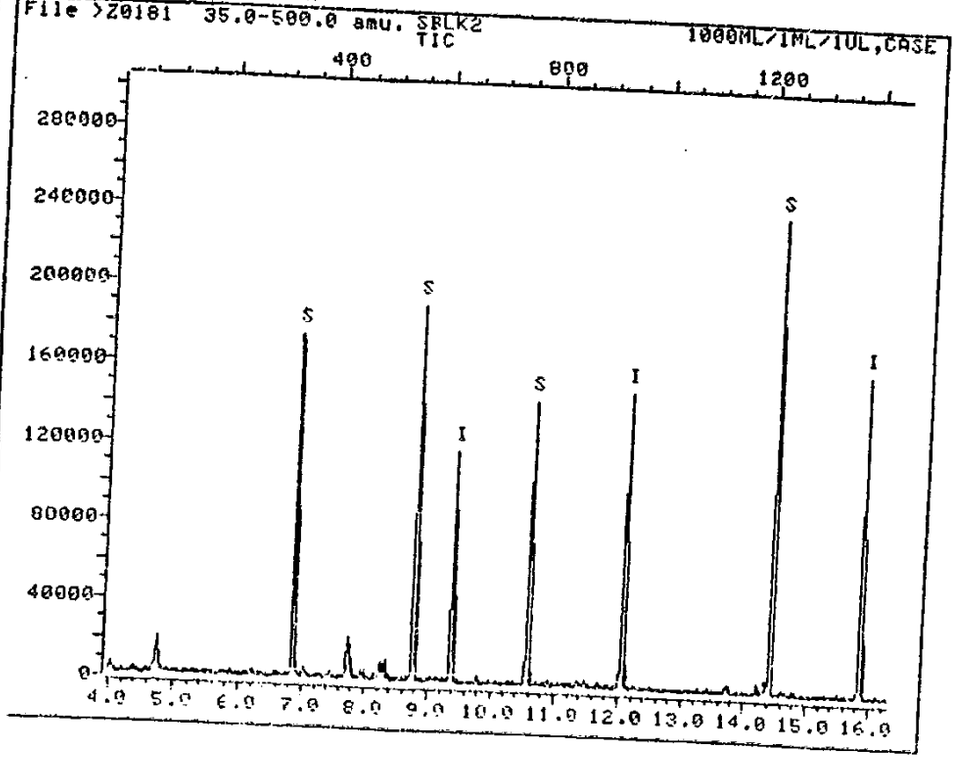
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. - -	UNKNOWN	7.03	3.	J
2. - -	UNKNOWN	7.72	10.	J
3. - -	UNKNOWN	8.30	3.	J
4. - -	UNKNOWN	8.25	4.	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

006162

FORM I SV-TIC 1/87 Rev.

TOTAL ION CHROMATOGRAM



Data File: >Z0181::L1 Quant Output File: >Z0181::QT
Name: SBLK2
Misc: 1000ML/1ML/1UL,CASE 8656,INST: Z

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880112 14:07

Operator ID: JOHN
Quant Time: 880112 22:56
Injected at: 880112 22:15

TIC page 1 of 3

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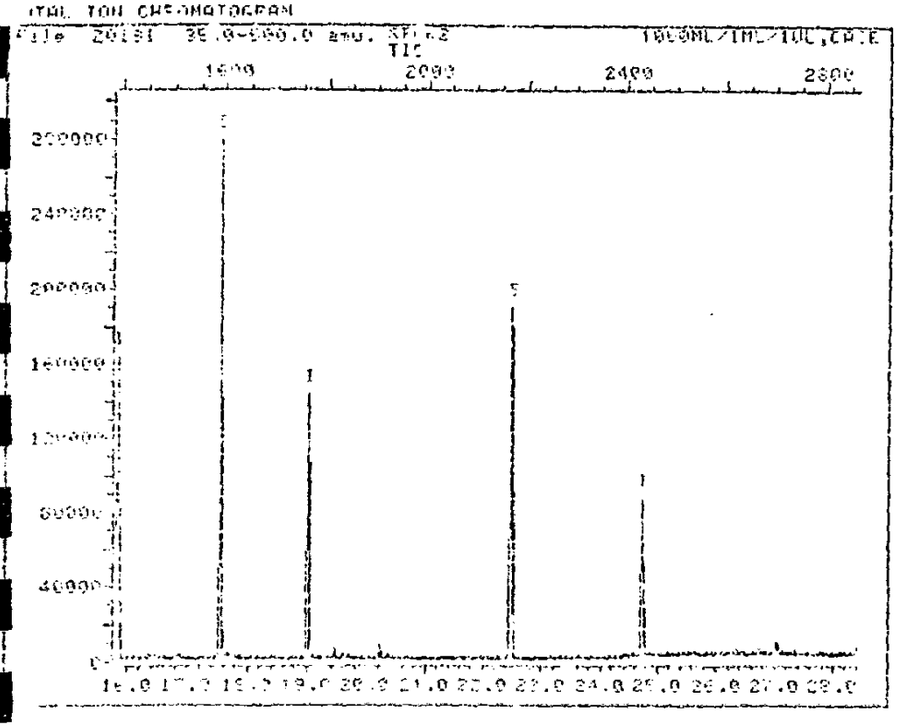


Data File: Z0181::L1 Quant Output File: Z0181::Q1
Name: SBLK2
Misc: 1000ML/1ML/1UL,CASE 8656,INST: Z

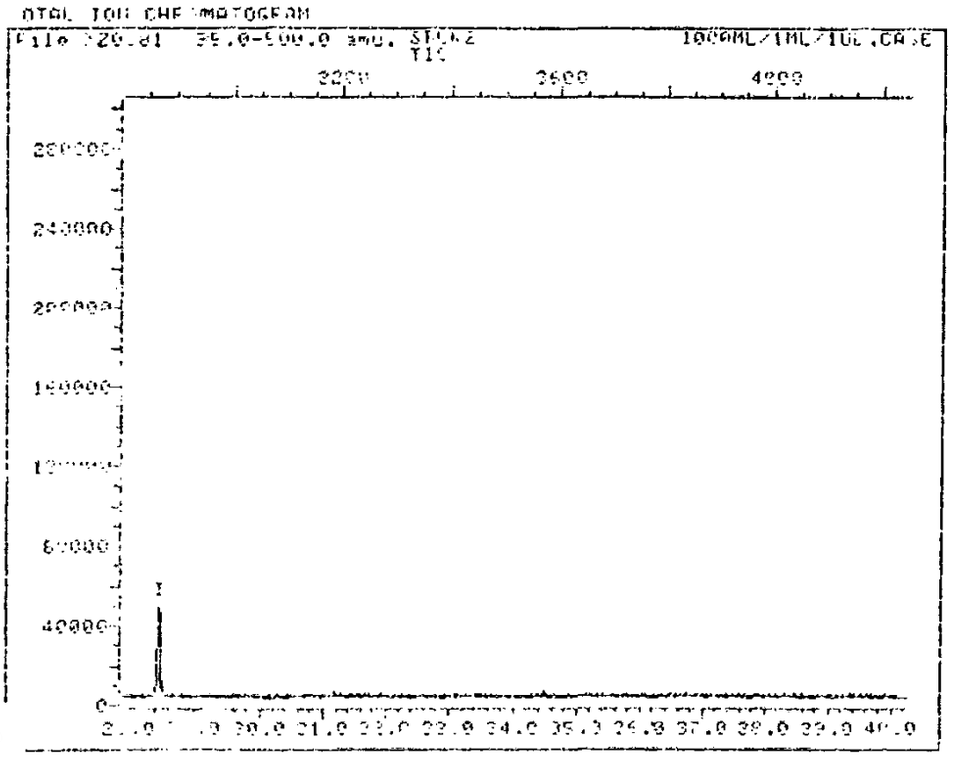
Id File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) -AS
Last Calibration: 890112 14:07

Operator ID: JOHN
Quant Time: 890112 22:56
Injected at: 890112 22:15

TIC page 2 of 3

006164

OTAL ION CHROMATOGRAM



Data File: Z0181::L1 Quant Output File: Z0181::Q1
Name: [illegible]
Misc: 100AML/1ML/1UL,CASE 8676,INST: Z

Id File: I_E[illegible]::[illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) GAS
Last Calibration: 880112 14:07

Operator ID: JOHN
Quant Time: 880112 2[illegible]:56
Injected at: 880112 22:15

TIC page 3 of 3

006165

QUANT REPORT

Operator ID: JOHN
Output File: [illegible]
Data File: [illegible]
Name: [illegible]
Misc: 1000ML [illegible]ML/1UL,CASE 8656,INST: Z

Quant Rev: 6
Quant Time: 880112 22:26
Injected at: 880112 22:15
Dilution Factor: 1.00000

[illegible] File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880112 14:07

	Compound	R.T.	Ion	Area	Conc	Units	%
[illegible]	*1,4-DI[illegible]-D4	9.37	15[illegible].0	[illegible]	40.0[illegible]	NG/UL	[illegible]
[illegible]	2-FLUOROPHENOL	6.[illegible]	112.0	[illegible]	110.[illegible]0	NG/UL	91
[illegible]	PHENOL-D5	8.[illegible]	9[illegible].0	118[illegible]	8[illegible].0[illegible]	NG/UL	[illegible]
[illegible]	*NAPHTHALENE-D8	12.95	136.[illegible]	129[illegible]	40.[illegible]0	NG/UL	97
[illegible]	N-TROBENZENE-D5	1[illegible].5[illegible]	8[illegible].0	[illegible]	6[illegible].8[illegible]	NG/UL	82
[illegible]	*ACENAPHTHENE-D10	15.34	164.[illegible]	[illegible]	40.00	NG/UL	97
[illegible]	2-FLUOROPHENOL	1[illegible].4[illegible]	17[illegible].0	1[illegible]	8[illegible].[illegible]	NG/UL	[illegible]
[illegible]	2,4,6-TRIBROMOPHENOL	17.55	[illegible]29.[illegible]	[illegible]	212.[illegible]	NG/UL	[illegible]
[illegible]	*PHENANTHRENE-D10	19.0[illegible]	18[illegible].0	[illegible]	40.0[illegible]	NG/UL	[illegible]
[illegible]	*CHRYSENE-D12	24.[illegible]2	[illegible]40.0	[illegible]	40.[illegible]0	NG/UL	[illegible]
[illegible]	TERPHENYL-D14	2[illegible].4[illegible]	244.0	128[illegible]	[illegible].[illegible]	NG/UL	[illegible]
[illegible]	*PERYLENE-D12	28.44	264.[illegible]	5415[illegible]	40.[illegible]	NG/UL	[illegible]

Compound is [illegible]

006166

'S data file header from : >Z0181

Sample: SPLK2 Operator: JOHN MS 1/12/88 22:15
Misc : 1000ML/1ML 1UL,CASE 8656,INST: Z
Sys. #: 4 MS model: 87 SN/HI rev.: IA ALS # : 0
Method file: #4RNA Tuning file: #4TUNE No. of extra records: 2
Source temp.: 200 Analyzer temp.: 0 Transfer line temp. : 0

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Z0181 SPLK2 1000ML/1ML/1UL,CASE 8656,INST: Z
35.01 500.0 CLP (DC TIC
Envelope: .00 Area Project: 15008. Max Peaks: 5 Bunching: 1
Envelope: 0.00 Results File IZ0181 Sorted by Time/Area INT

Peak	P.T. min.	first scan	max scan	last scan	peak height	raw area	corr. area	corr. % max.	% of total
1	4.74	[illegible]	91	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	7.03	[illegible]	369	369	4824	27711	15908	27.17	9.328
3	7.72	414	440	448	19706	77987	56074	95.79	2.080
4	8.25	493	502	505	8048	29201	22507	38.46	13.1[illegible]
5	8.30	505	509	514	9696	28.26	17514	29.9	10.[illegible]70

Sum of corrected areas: 1[illegible]54[illegible].
Summary of Unknowns PRM Library Search and Quantitation

Standard	Concentration	Area	Retention Time	Unknown Window
1	40.0	225299.	9.[illegible]	3.97 - 10.[illegible]1
2	40.0	296211.	12.05	10.71 - 13.95
3	40.0	299662.	15.94	13.95 - 17.42
4	40.0	291902.	19.00	17.42 - 2[illegible].8[illegible]
5	40.0	176704.	24.72	21.86 - 26.58
6	40.0	150076.	28.44	26.58 - 40.25

Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 1000.00 Amount Used (AU) = 1000.00

Correction Factor = 1.00 = (AM / AU) / (DF * FS)

$$\text{Unknown Concentration} = \frac{\text{Conc Int Std}}{\text{Area Int Std}} * \text{Area Unk} * \text{Correction Factor}$$

11:14 PM TUE., 12 JAN., 1988

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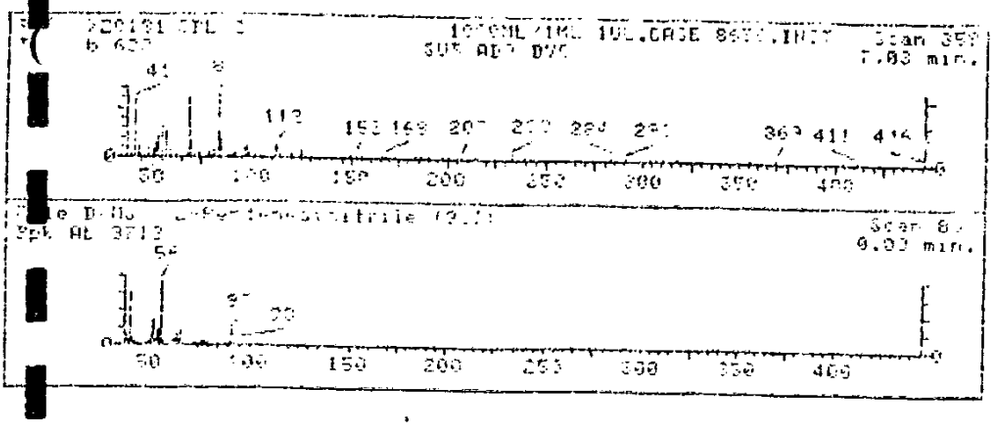
006167

006167



Unknown #

Area = 15909.00 Tentative Concentration is 3.00

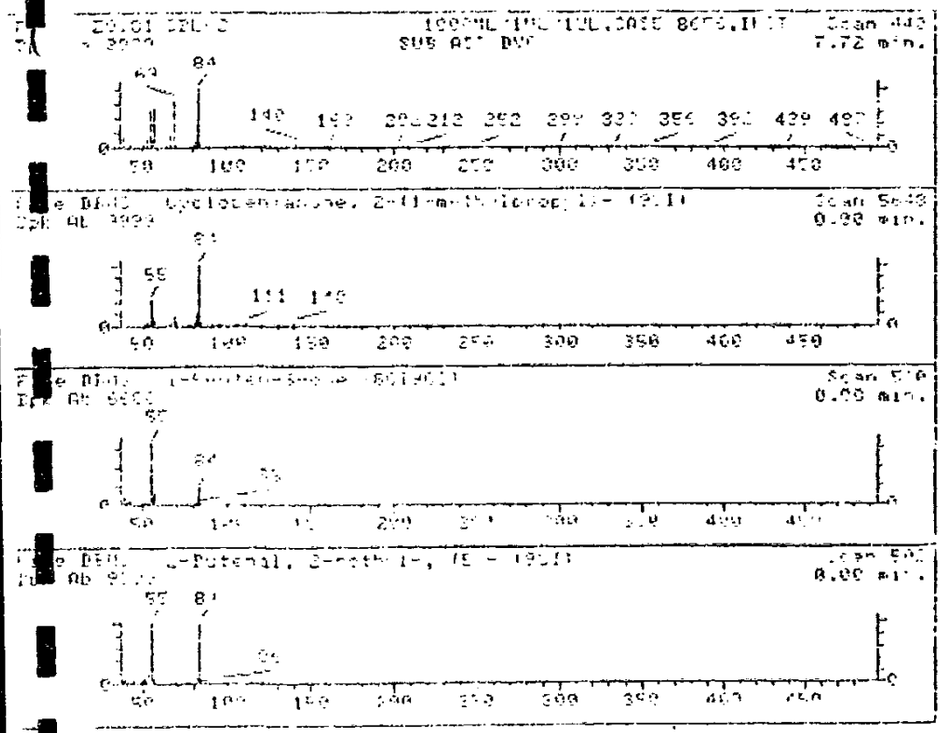
1. 2-Pentenedinitrile (9.1) 9% CHAN.

Sample file: 320 91 Spectrum #: 309
Search speed: 1 Tilting option: N No. of ion ranges searched: 49

	Prob.	LAB #	CON #	ROOT	K	OK	#PLS	TILT	%	CON	C_I	R_IU
1.	20*	[illegible]	420	[illegible]	23	64	2	0	1[illegible]	[illegible]	5	13

006168

C 144



Unknown #..

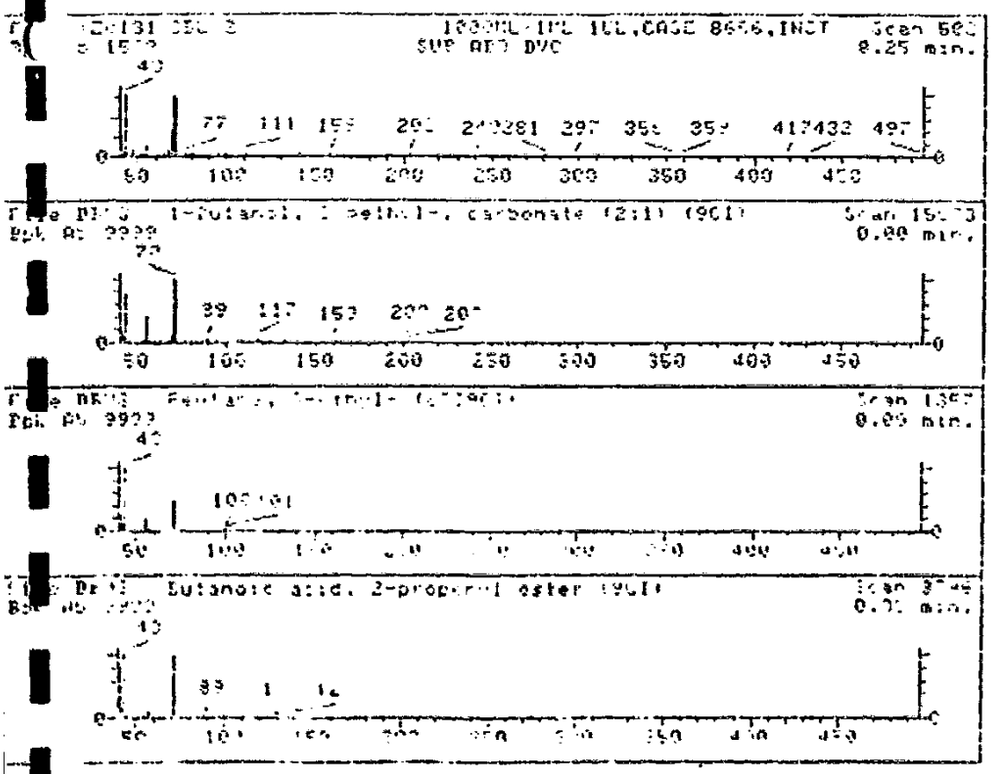
Area = 56074.00 Tentative Concentration : 10.00

1. Cyclopentanone, 2-(1-methylpropyl)- (9CI) 140 C9H16O
2. 1-Penten-3-one (8CI9CI) 84 C5H8O
3. 2-Butenal, 2-methyl-, (E)- (9CI) 84 C5H8O
4. Cyclohexane, 1-OT (8CI9CI) 84 C6H12
5. Formamide, N-(cyanomethyl)- (8CI9CI) 84 C3H4N2O
6. 2-Nonen-4-one (8CI9CI) 140 C9H16O
7. 1H-Pyrazole, 4,5-dihydro-5-methyl- (9CI) 84 C4H8N2

Sample file: 120191 Spectrum #: 440
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

	Prob.	CAS #	CON #	PDOT	K	DK	#FLG	TILT	%	[illegible]	C_I	P_IU
1	42*	6376927	5763	DRMS	32	57	1	0	97	21	[illegible]	19
2	42*	1629539	5671	DRMS	26	58	3	0	582	21	[illegible]	13
3	42*	497070	5665	DRMS	26	57	3	0	101	21	1	13
4	42*	110927	5676	DRMS	25	68	3	0	108	21	[illegible]	13
5.	41*	5018979	5654	DRMS	24	68	3	0	123	[illegible]	01	145
6	15*	32064725	5765	DRMS	22	61	2	0	81	60	3	13
7	15*	1568203	5659	DRMS	22	63	2	0	81	60	3	13

006169



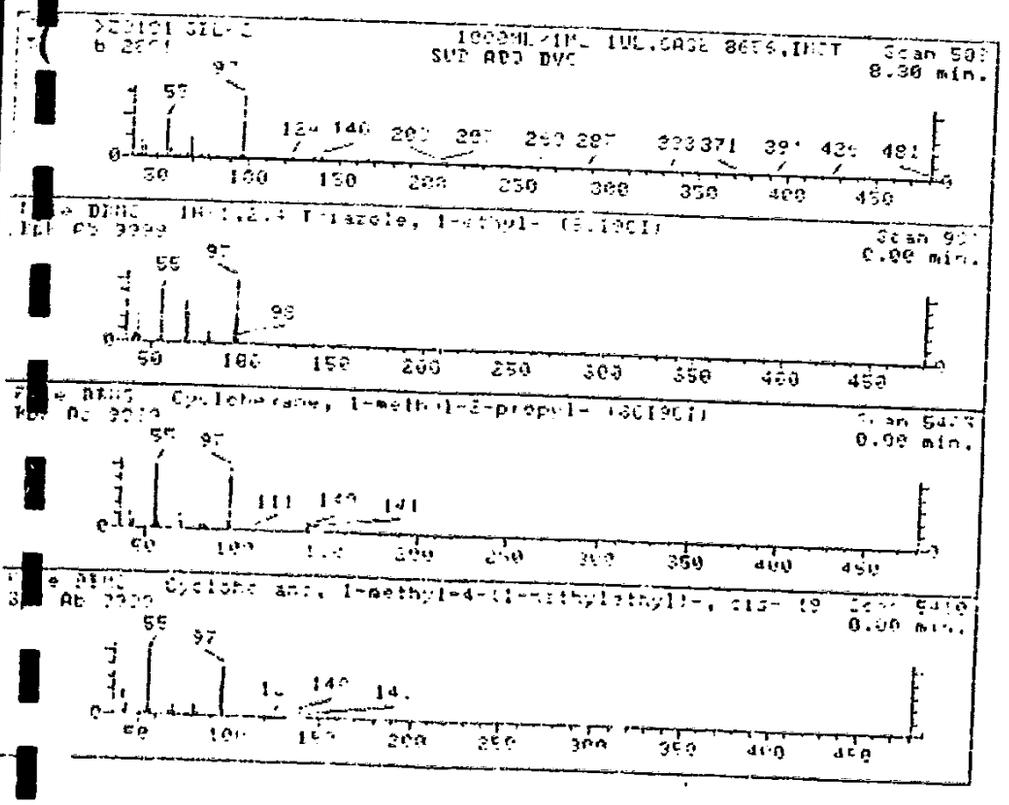
Unknown #,-
Area = 22507.00 Tentative Concentration is 4.00

1. 1-Butanol, 3-methyl-, carbonate (2:1) (9CI) 200 C11H20O3
2. Pentane, 3-ethyl- (8CI9CI) 100 C7H16
3. Butanoic acid, 2-propenyl ester (9CI) 120 C7H12O2

Sample file: [illegible] Spectrum #: 502
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

	Prob.	CAS #	CON #	RUOT	K	OK	#FLG	TILT	%	CON	C_I	P_IU
1.	60*	2050[illegible]	7898	DBMS	24	80	3	0	90	11	30	12
2.	20*	617[illegible]7	3700	DBMS	24	60	2	0	100	65	5	14
3.	20*	2051797	3738	DBMS	24	60	3	0	94	64	5	1[illegible]

006170



Unknown

Unknown [illegible]

Area = 17514.00 Tentative Concentration is 3.00

1. 1H-1,2,4-Triazole, 1-ethyl- (8CI9CI) 97 C4H7N
2. Cyclohexane, 1-methyl-2-propyl- (8CI9CI) 140 C10H20
3. Cyclohexane, 1-methyl-4-(1-methylethyl)-, cis- (9CI) 140 C10H20
4. Cyclopropanemethanol, 2,2,3,3-tetramethyl- (8CI9CI) 128 C8H16O

Sample File: [illegible] Spectrum #: 503
Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	PDOT	K	D	# LG	TILT	*	CON	C_I	R_IU
1.	42*	16778704	8690	DPMS	30	66	3	0	74	23	17	13
2.	11*	4291796	8782	DPMS	22	67	3	0	59	61	2	12
3.	11*	6069983	8786	DPMS	23	74	3	0	59	61	2	12
4.	11*	2415965	8766	DPMS	22	[illegible]	3	0	59	61	2	12

006171

006171

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MS

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 600. (g/mL) ML

Lab File ID: Z0178

Level: (low/med) LOW

Date Received: 12/10/87

% Moisture: not dec.100. dec. 0.

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	220.	
111-44-4	BIS(2-CHLOROETHYL)ETHER	17.	U
95-57-8	2-CHLOROPHENOL	250.	
541-73-1	1,3-DICHLOROBENZENE	17.	U
106-46-7	1,4-DICHLOROBENZENE	120.	
100-51-6	BENZYL ALCOHOL	17.	U
95-50-1	1,2-DICHLOROBENZENE	17.	U
95-48-7	2-METHYLPHENOL	17.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	17.	U
106-44-5	4-METHYLPHENOL	17.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	66.	
67-72-1	HEXACHLOROETHANE	17.	U
98-95-3	NITROBENZENE	17.	U
78-59-1	ISOPHORONE	17.	U
88-75-5	2-NITROPHENOL	17.	U
105-67-9	2,4-DIMETHYLPHENOL	17.	U
65-85-0	BENZOIC ACID	83.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	17.	U
120-83-2	2,4-DICHLOROPHENOL	17.	U
120-82-1	1,2,4-TRICHLOROBENZENE	120.	
91-20-3	NAPHTHALENE	17.	U
106-47-8	4-CHLOROANILINE	17.	U
87-68-3	HEXACHLOROBUTADIENE	17.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	170.	
91-57-6	2-METHYLNAPHTHALENE	17.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	17.	U
88-06-2	2,4,6-TRICHLOROPHENOL	17.	U
95-95-4	2,4,5-TRICHLOROPHENOL	17.	U
91-58-7	2-CHLORONAPHTHALENE	17.	U
88-74-4	2-NITROANILINE	83.	U
131-11-3	DIMETHYL PHTHALATE	17.	U
208-96-8	ACENAPHTHYLENE	17.	U
606-20-2	2,6-DINITROTOLUENE	17.	U

006172

FORM I SV-1

1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MS

Lab Name: AATS Contract: 68-01-7392

ab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: Z0178

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-NITROANILINE	17.	U
83-32-9	ACENAPHTHENE	130.	
51-28-5	2,4-DINITROPHENOL	83.	U
100-02-7	4-NITROPHENOL	260.	
132-64-9	DIBENZOFURAN	17.	U
121-14-2	2,4-DINITROTOLUENE	150.	
84-66-2	DIETHYLPHTHALATE	17.	U
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	17.	U
86-73-7	FLUORENE	17.	U
100-01-6	4-NITROANILINE	83.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	83.	U
86-30-6	N-NITROSODIPHENYLAMINE	17.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	17.	U
118-74-1	HEXACHLOROBENZENE	17.	U
87-86-5	PENTACHLOROPHENOL	330.	E
85-01-8	PHENANTHRENE	17.	U
120-12-7	ANTHRACENE	17.	U
84-74-2	DI-N-BUTYLPHTHALATE	17.	U
206-44-0	FLUORANTHENE	17.	U
129-00-0	PYRENE	150.	
85-68-7	BUTYLBENZYLPHTHALATE	17.	U
91-94-1	3,3'-DICHLOROBENZIDINE	33.	U
56-55-3	BENZO(A)ANTHRACENE	17.	U
218-01-9	CHRYSENE	17.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	17.	U
117-84-0	DI-N-OCTYLPHTHALATE	17.	U
205-99-2	BENZO(B)FLUORANTHENE	17.	U
207-08-9	BENZO(K)FLUORANTHENE	17.	U
50-32-8	BENZO(A)PYRENE	17.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	17.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	17.	U
191-24-2	BENZO(G,H,I)PERYLENE	17.	U

(1) - Cannot be separated from diphenylamine

FORM I SV-2 1/87 Rev.

006173

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732MS

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: Z0178

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

Number TICs found: 0

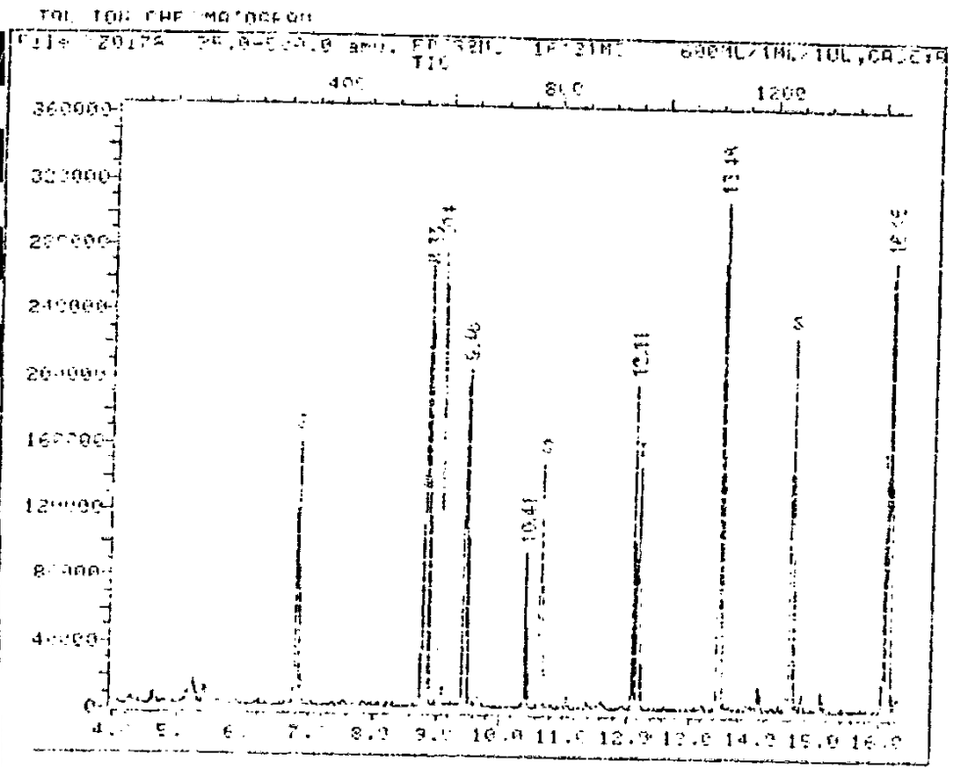
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

006174

FORM I SV-TIC 1/87 Rev.

TOL ION CHROMATOGRAM



Data File: [illegible]
Name: [illegible] 16421MS
Mis: [illegible] ,CASE:[illegible],INST: 2

Quant Output File: [illegible]

Id File: ID_[illegible]
Title: [illegible] ORGANIC ANALYSIS (EPA [illegible]) SAS
Last Calibration: [illegible]80112 14:[illegible]7

Operator ID: [illegible]
Quant Time: [illegible]80112 19:23
Injected at: [illegible]

TIC page 1 of 3

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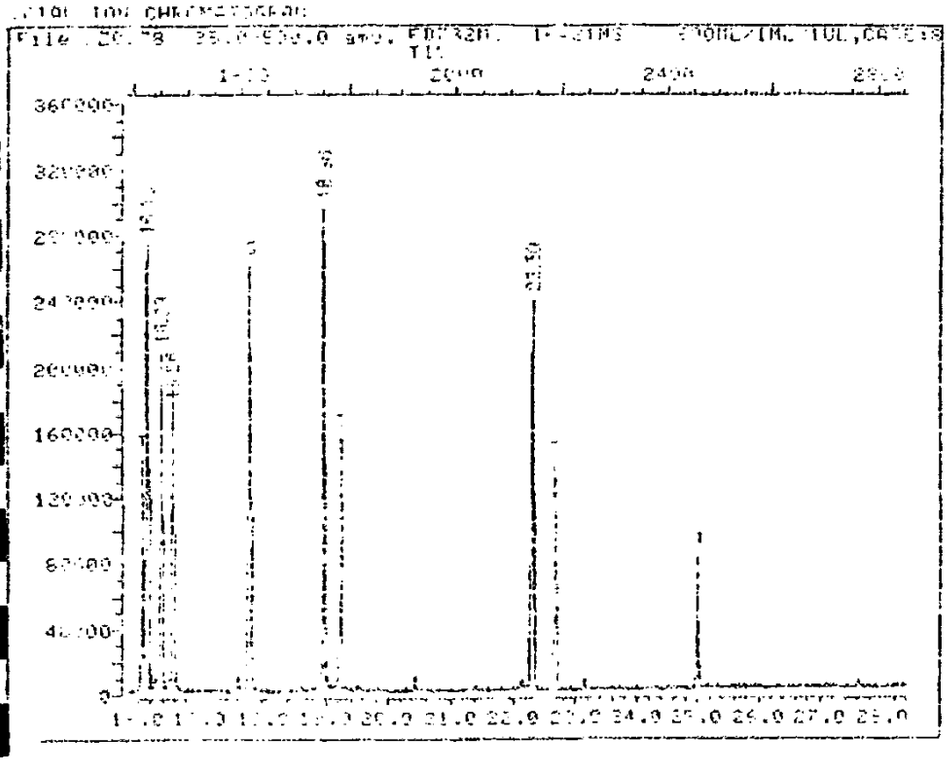

Data File: [illegible]:L1 Quant Output File: [illegible]
Name: [illegible] 1642IMS
Misc: [illegible],CASE:[illegible],INST: Z

Id File: ID_[illegible]2::EX
Title: [illegible] ORGANIC ANALYSIS ([illegible])
Last Calibration: 880112 14:07

Operator ID: [illegible]
Quant Time: 880112 19:23
Injected at: 8[illegible]112 19:39

TIC page 2 of 3

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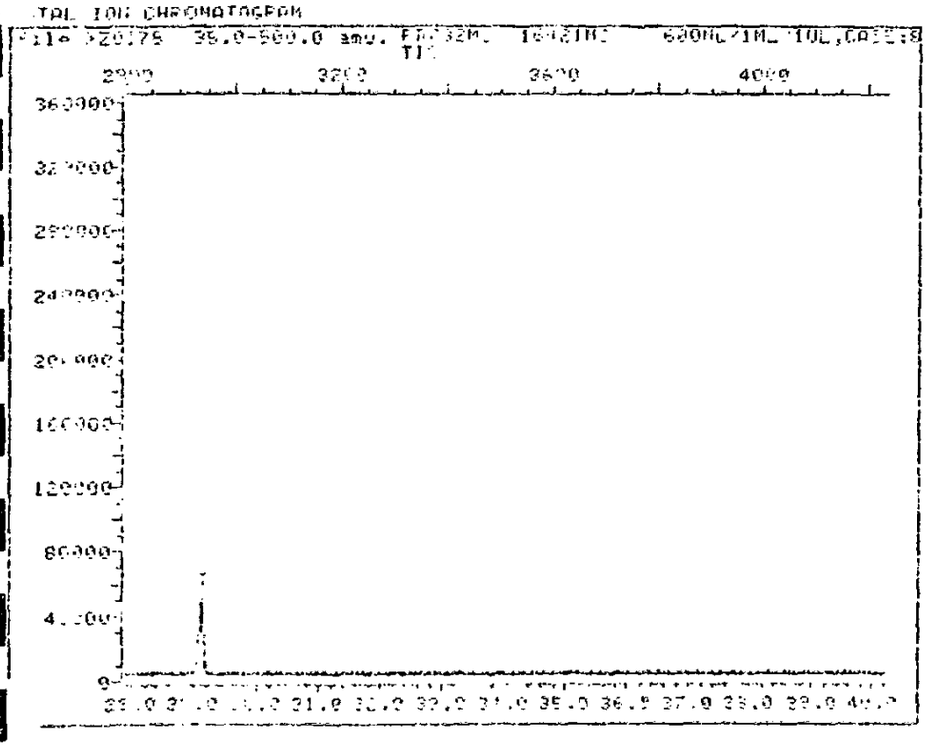
TAL ION CHROMATOGRAM



Data File: >Z0 78::L1 Quant Output File: Z01 9::QT
Name: FU73IMS 1-421MS
Misc: 600ML/1ML/1UL,CASE:8e-6,INST: Z

ID File: ID_RN2::E4
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 62[illegible]) BAS
Last Calibration: 890112 14:07

Operator ID: JOHN
Quant Time: 890112 19:23
Injected at: 890112 18:39

TIC page 3 of 3

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QUANT REPOR

Operator ID: JOHN
Output File: [illegible]
Data File: [illegible]
Name: [illegible]
Misc: 600ML/[illegible],CASE:8[illegible],INST: Z

Quant Rev: 6 Quant Time: 880112 19:23
Injected at: 880112 18:39
Dilution Factor: 1.00000

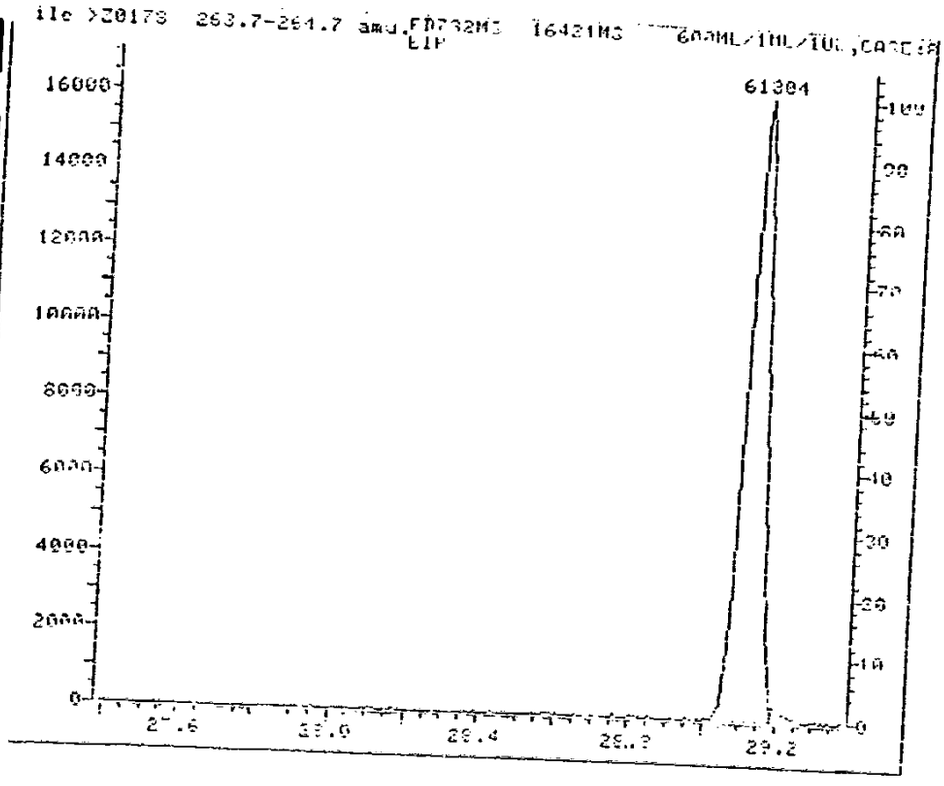
[illegible] File: [illegible]
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 62[illegible]) [illegible]
Last Calibration: 880112 14:07

	Compound	P.T.	Ratio	Area	Conc	Units	Q
[illegible]	*1,4-DIHYDROBENZENE-[illegible]	9.41	15[illegible].0	[illegible]	40.00	NG/UL	[illegible]
[illegible]	PHENOL	8.83	94.0	216[illegible]	[illegible]33.73	NG/UL	[illegible]
4[illegible]	2-CHLOROPHENOL	9.04	125.0	1[illegible]	147.1[illegible]	NG/UL	[illegible]
[illegible]	1,4-DIHYDROBENZENE	9.46	146.0	[illegible]	74.95	NG/UL	[illegible]
[illegible]	N-NITROSO-DI-N-PROPYLAMINE	10.41	7[illegible].0	[illegible]	39.49	NG/UL	[illegible]
14)	2-FLUOROPHENOL	6.79	112.0	1129.4	102.51	NG/UL	94
1[illegible])	PHENOL-D[illegible]	8.79	9[illegible].0	1[illegible]	8[illegible].5[illegible]	NG/UL	
1[illegible])	*NAPHTHALENE-[illegible]	12.18	136.0	125[illegible]	40.00	NG/UL	[illegible]
2[illegible])	1,2,4-TRICHLOROBENZENE	1[illegible].11	18[illegible].0	[illegible]	[illegible]4.89	NG/UL	[illegible]
28)	4-CHLORO-3-METHYLPHENOL	13.48	107.0	[illegible]	101.57	NG/UL	[illegible]
3[illegible]	NITROBENZENE-D[illegible]	10.65	8[illegible].0	[illegible]	6[illegible].7[illegible]	NG/UL	[illegible]
3[illegible])	*ACENAPHTHENE-[illegible]	16.07	164.0	65[illegible]	40.00	NG/UL	95
41)	ACENAPHTHENE	16.15	15[illegible].0	1[illegible]	77.02	NG/UL	[illegible]
4[illegible])	4-NITROPHENOL	16.39	109.0	65[illegible]	1[illegible]4.25	NG/UL	98
4[illegible])	2,4-DINITROTOLUENE	16.56	16[illegible].0	[illegible]066	[illegible].30	NG/UL	[illegible]
50)	2-FLUOROBIPHENYL	14.62	172.0	153[illegible]	[illegible]8.10	NG/UL	99
5[illegible])	2,4,6-TRIBROMOPHENOL	1[illegible].78	32[illegible].7	81[illegible]	1[illegible].12	NG/UL	[illegible]
5[illegible])	*PHENANTHRENE-D10	19.22	188.0	[illegible]	40.00	NG/UL	82
5[illegible])	PENTACHLOROPHENOL	18.9[illegible]	26[illegible].0	[illegible]	1[illegible].8[illegible]	NG/UL	[illegible]
62)	*CHRYSENE-D12	25.00	240.0	[illegible]	40.00	NG/UL	[illegible]
6[illegible])	PYRENE	22.30	20[illegible].0	1[illegible]	91.36	NG/UL	92
6[illegible])	TERPHENYL-[illegible]	22.65	244.0	[illegible]	[illegible]1.61	NG/UL	96
70)	*PERYLENE-D[illegible]	2[illegible].12	26[illegible].0	6130[illegible]	4[illegible].00	NG/UL	

Compound is [illegible]

006178

154



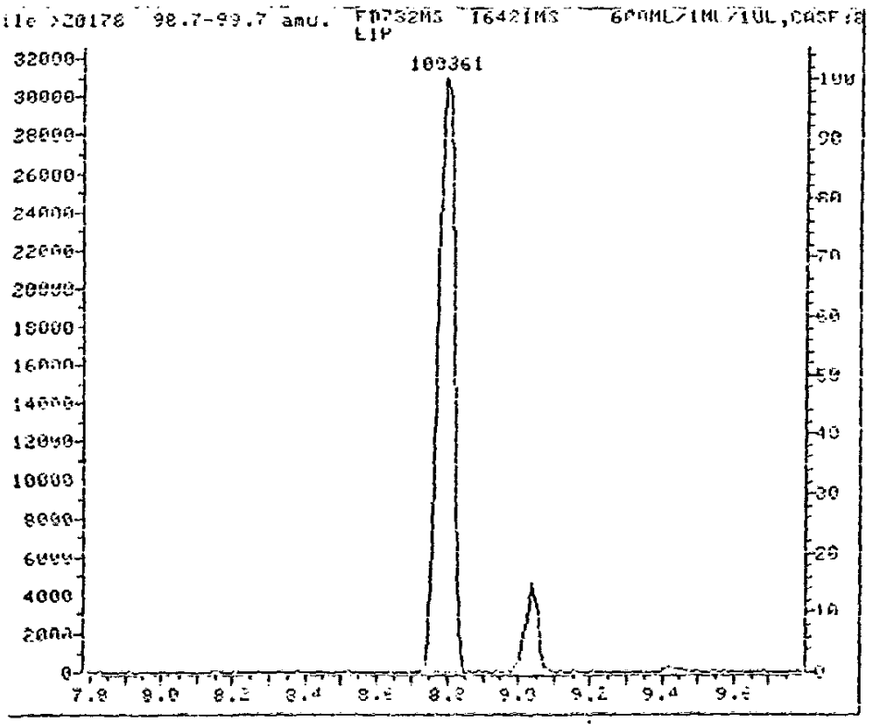
Data File: >20178::L1
Name: FD732MS 16421MS
Misc: 600ML/1ML/10UL,CASE:8646,INST: 2
Quant Time: 880112 19:23
Injected at: 880112 19:49

Quant Output File: ^20178::U1
Quant ID File: ID_BNC::EX
Last Calibration: 880112 14:07

Compound No: 78 (ISID)
Compound Name: PERYLENE-D12
Scan Number: 2941
Retention Time: 29.12 min.
Quant Ion: 264.0
Area: 61304
Concentration: 40.00 NG/UL

This report was produced by WOPEA on: 880112 19:36

006179



Data File: >20178::L1 Quant Output File: ^20178::Q1
Name: FD732MS 16421MS
Misc: 600ML/1ML/1UL,CASE:8656,INST:.2
Quant Time: 880112 19:23 Quant ID File: ID_BNZ::EX
Injected at: 880112 18:59 Last Calibration: 880112 14:0

Compound No: 15
Compound Name: PPE'NUL-D5
Scan Number: 962
Retention Time: 9.79 min.
Quant Ion: 99.0
Area: 100361M
Concentration: 80.52 NG/UL

This report was produced by WAPLA on: 880112 19:38

006180

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MSD

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 600. (g/mL) ML

Lab File ID: Z0179

Level: (low/med) LOW

Date Received: 12/10/87

% Moisture: not dec. 100. dec. 0.

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6

Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	PHENOL	210.	
111-44-4	BIS(2-CHLOROETHYL)ETHER	17.	U
95-57-8	2-CHLOROPHENOL	230.	
541-73-1	1,3-DICHLOROBENZENE	17.	U
106-46-7	1,4-DICHLOROBENZENE	120.	
100-51-6	BENZYL ALCOHOL	17.	U
95-50-1	1,2-DICHLOROBENZENE	17.	U
95-48-7	2-METHYLPHENOL	17.	U
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	17.	U
106-44-5	4-METHYLPHENOL	17.	U
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	55.	
67-72-1	HEXACHLOROETHANE	17.	U
98-95-3	NITROBENZENE	17.	U
78-59-1	ISOPHORONE	17.	U
88-75-5	2-NITROPHENOL	4.	J
105-67-9	2,4-DIMETHYLPHENOL	17.	U
65-85-0	BENZOIC ACID	83.	U
111-91-1	BIS(2-CHLOROETHOXY)METHANE	17.	U
120-83-2	2,4-DICHLOROPHENOL	17.	U
120-82-1	1,2,4-TRICHLOROBENZENE	130.	
91-20-3	NAPHTHALENE	17.	U
106-47-8	4-CHLOROANILINE	17.	U
87-68-3	HEXACHLOROBUTADIENE	17.	U
59-50-7	4-CHLORO-3-METHYLPHENOL	170.	
91-57-6	2-METHYLNAPHTHALENE	17.	U
77-47-4	HEXACHLOROCYCLOPENTADIENE	17.	U
88-06-2	2,4,6-TRICHLOROPHENOL	17.	U
95-95-4	2,4,5-TRICHLOROPHENOL	17.	U
91-58-7	2-CHLORONAPHTHALENE	17.	U
88-74-4	2-NITROANILINE	83.	U
131-11-3	DIMETHYL PHTHALATE	17.	U
208-96-8	ACENAPHTHYLENE	17.	U
606-20-2	2,6-DINITROTOLUENE	17.	U

006181

FORM I SV-1

1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MSD

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: Z0179

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-09-2	3-NITROANILINE	17.	U
83-32-9	ACENAPHTHENE	120.	
51-28-5	2,4-DINITROPHENOL	83.	U
100-02-7	4-NITROPHENOL	290.	E
132-64-9	DIBENZOFURAN	17.	U
121-14-2	2,4-DINITROTOLUENE	150.	
84-66-2	DIETHYLPHTHALATE	17.	U
7005-72-3	4-CHLOROPHENYL-PHENYLETHER	17.	U
86-73-7	FLUORENE	17.	U
100-01-6	4-NITROANILINE	83.	U
534-52-1	4,6-DINITRO-2-METHYLPHENOL	83.	U
86-30-6	N-NITROSODIPHENYLAMINE	17.	U
101-55-3	4-BROMOPHENYL-PHENYLETHER	17.	U
118-74-1	HEXACHLOROBENZENE	17.	U
87-86-5	PENTACHLOROPHENOL	330.	E
85-01-8	PHENANTHRENE	17.	U
120-12-7	ANTHRACENE	17.	U
84-74-2	DI-N-BUTYLPHTHALATE	17.	U
206-44-0	FLUORANTHENE	17.	U
129-00-0	PYRENE	180.	
85-68-7	BUTYLBENZYLPHTHALATE	17.	U
91-94-1	3,3'-DICHLOROBENZIDINE	33.	U
56-55-3	BENZO(A)ANTHRACENE	17.	U
218-01-9	CHRYSENE	17.	U
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	17.	U
117-84-0	DI-N-OCTYLPHTHALATE	17.	U
205-99-2	BENZO(B)FLUORANTHENE	17.	U
207-08-9	BENZO(K)FLUORANTHENE	17.	U
50-32-8	BENZO(A)PYRENE	17.	U
193-39-5	INDENO(1,2,3-CD)PYRENE	17.	U
53-70-3	DIBENZ(A,H)ANTHRACENE	17.	U
191-24-2	BENZO(G,H,I)PERYLENE	17.	U

(1) - Cannot be separated from diphenylamine

006182

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FD732MSD

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: Z0179

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec.100. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/12/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

Number TICs found: 0

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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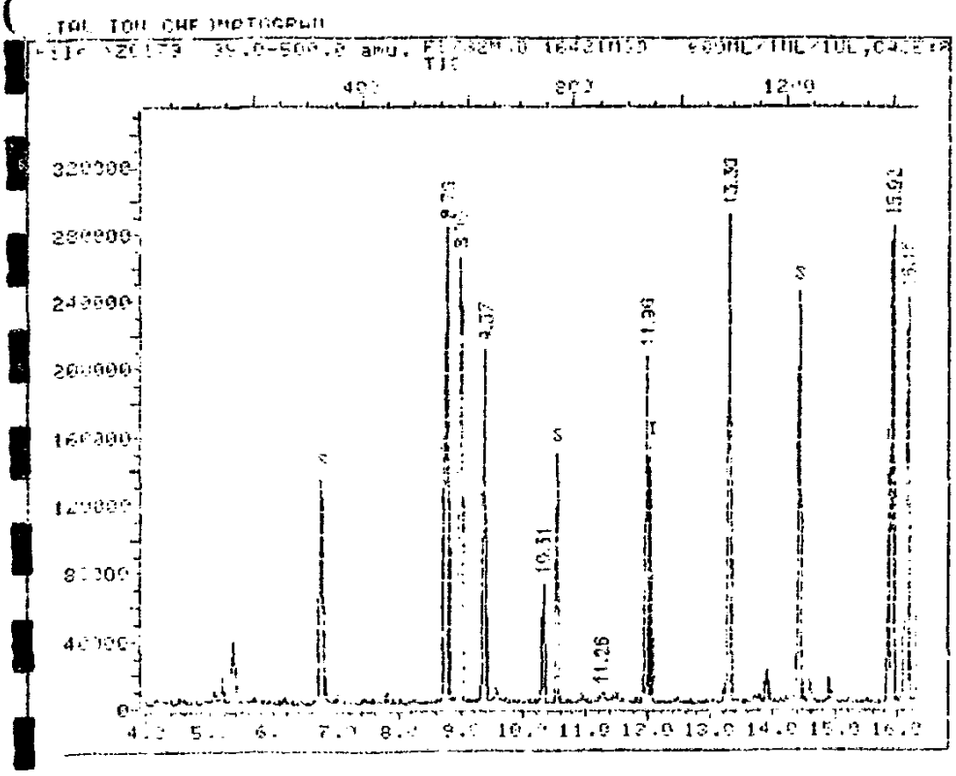
006183

FORM I SV-TIC 1/87 Rev.



Data File: :ZC129::L1 Quant Output File: :ZC129::Q1
Name: FL 32MSD 16-21MSD
Misc: 600ML/1ML/1UL,CASE:8656,INST: Z

Id File: ID_BN0::L1
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) HAS
Last Calibration: 890112 14:07

Operator ID: JOHN
Quant Time: 890112 20:15
Injected at: 280112 19:33

TIC page 1 of 3

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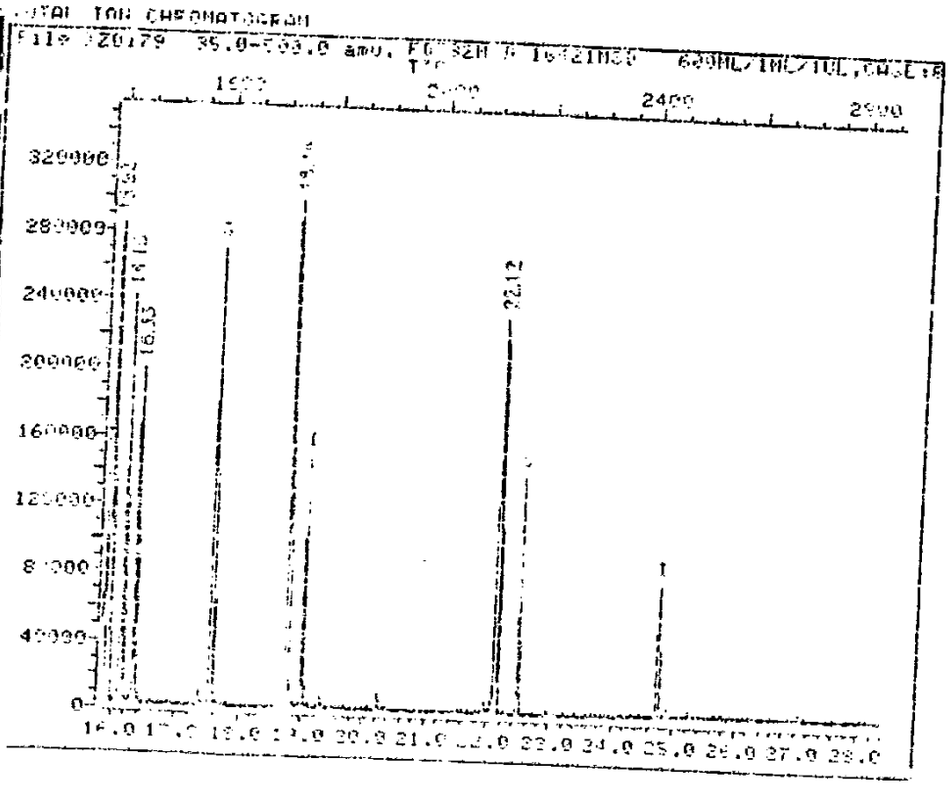
006184

TOTAL ION CHROMATOGRAM



Data File: ^Z0179::L1
Name: FD732M3D 16421M3D
Misc: 600ML/1ML/1UL,CASE:8656,INST: 2

Quant Output File: ^Z0179::Q1

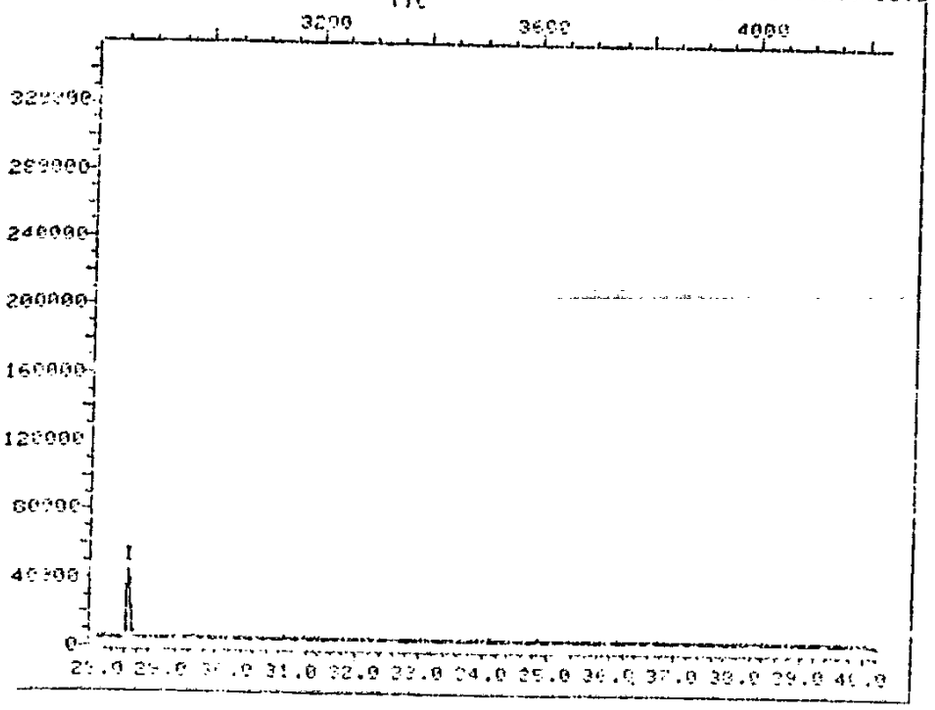
Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880112 14:07

Operator ID: JOHN
Quant Time: 880112 20:15
Injected at: 880112 19:37

TIC page 2 of 3

006185

TAL ION CHROMATOGRAM



Data File: >Z0179::L1 Quant Output File: ^Z0179::Q
Name: FD732MSD 16421MSD
Misc: 600ML/1ML/1UL,CASE:8656,INST: Z

Id File: ID_BN2::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880112 14:07

Operator ID: J-[illegible]
Quant Time: 880112 20:15
Injected at: 880112 19:33

TIC page 3 of 3

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QUANT REPORT

Operator ID: JOHN Quant Rev: 6 Quant Time: 880112 20:15
Output File: ^Z0179::QT Injected at: 880112 19:33
Data File: >Z0179::L1 Dilution Factor: 1.00000
Name: FD732MSD 16421MSD
Misc: 600ML/1ML/1UL,CASE:8656,INST: Z

File: ID_BN?::EX
Title: SEMI-VOLATILE ORGANIC ANALYSIS (EPA 625) SAS
Last Calibration: 880112 14:07

	Compound	R.T.	Q ion	Area	Conc	Units	Q
1	*1,4-DICHLOROBENZENE-D4	9.33	15[illegible].0	37149	40.00	NG/UL	81
2)	PHENOL	8.76	94.0	218799	127.43	NG/UL	92
3)	2-CHLOROPHENOL	8.96	12[illegible].0	190822	135.58	NG/UL	92
)	1,4-DICHLOROBENZENE	9.37	146.0	96200	70.12	NG/UL	93
)	N NITROSO-DI-N-PROPYLAMINE	10.31	70.0	41199	32.72	NG/UL	95
4)	2-FLUOROPHENOL	6.73	112.0	113555	96.98	NG/UL	94
)	PHENOL-D5	8.72	9[illegible].0	100010	75.49	NG/UL	92
)	*NAPHTHALENE-D8	12.03	136.0	128054	40.00	NG/UL	95
3)	2-NITROPHENOL	11.26	139.0	1815	2.40	NG/UL	84
4)	1,2,4-TRICHLOROBENZENE	11.96	180.0	93266	78.95	NG/UL	87
	4-CHLORO-3-METHYLPHENOL	13.30	107.0	198919	99.77	NG/UL	86
	NITROBENZENE-D5	10.54	82.0	103959	68.62	NG/UL	83
)	*ACENAPHTHENE-D10	15.85	164.0	66500	40.00	NG/UL	98
)	ACENAPHTHENE	15.92	153.0	156740	73.26	NG/UL	95
)	4-NITROPHENOL	16.15	109.0	7531[illegible]	124.9[illegible]	NG/UL	93
5)	2,4-DINITROTOLUENE	16.33	165.0	81279	92.17	NG/UL	82
)	2-FLUOROBIPHENYL	14.41	172.0	198769	30.26	NG/UL	[illegible]
)	2,4,6-TRIBROMOPHENOL	17.55	329.7	86663	194.74	NG/UL	93
)	*PHENANTHRENE-D10	19.01	189.0	192176	40.00	NG/UL	80
7)	PENTACHLOROPHENOL	18.24	266.0	97782	197.81	NG/UL	95
)	*CHRYSENE-D12	24.73	240.0	52671	40.00	NG/UL	96
)	PYRENE	22.12	202.0	210930	106.63	NG/UL	94
)	TERPHENYL-D14	27.43	244.0	99056	79.41	NG/UL	96
)	*PERYLENE-D12	28.45	264.0	39367M	40.00	NG/UL	

* Compound is ISTD

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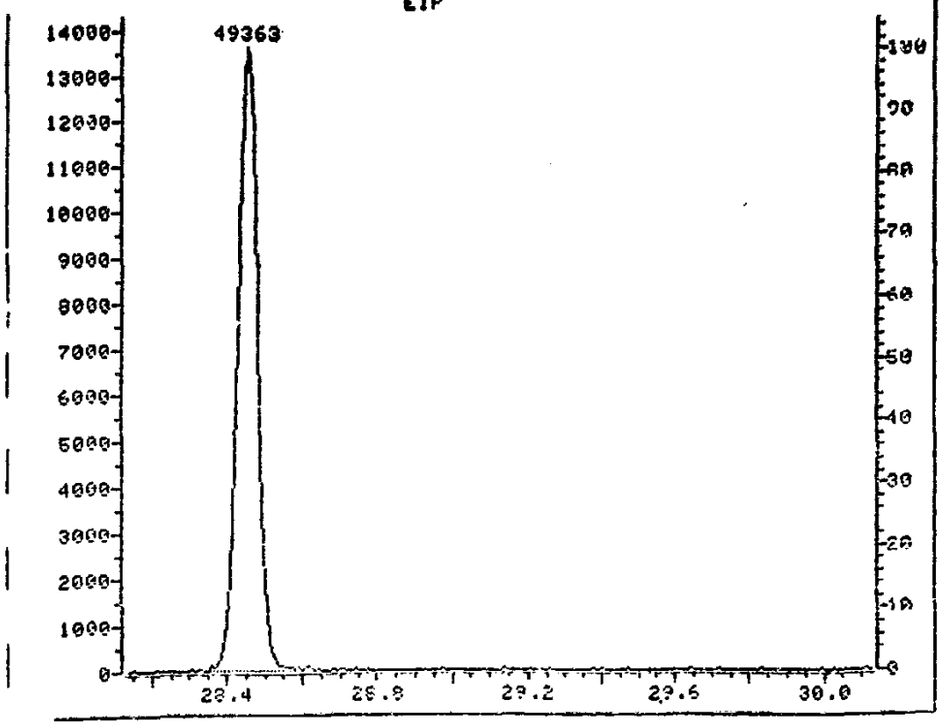
..le >Z0179 263.7-264.7 amu.FD732MSD 16421MSD 600ML/1ML/1UL,CASE:8
EIP



006188

Data File: >Z0179::L1 Quant Output File: ^Z0179::W1
Name: FD732MSD 16421MSD
Misc: 600ML/1ML/1UL,CASE:8656,INST: Z
Quant Time: 880112 20:15 Quant ID File: ID_BN2::EX
Injected at: 880112 19:33 Last Calibration: 880112 14:07

Compound No: 70 (ISTD)
Compound Name: PERYLENE-D12
Scan Number: 2864
Retention Time: 28.45 min.
Quant Ion: 264.0
Area: 49363M
Concentration: 40.00 NG/UL

This report was produced by QAREA on: 880112 20:52

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
1	PBLK	105	
2	FD732	61	
3	FD732MS	53	
4	FD732MSD	58	
5	FD733	98	
6			
7			
8			
9			
10			
11			
12			
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ADVISORY QC LIMITS

S1 (DBC) = DIBUTYL CHLORENDATE (48-136)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

FORM II PEST-1 1/87 Rev.

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3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix Spike - EPA Sample No.: FD732

COMPOUND	SPIKE ADDED (UG/L)	SAMPLE CONCENTRATION (UG/L)	MS CONCENTRATION (UG/L)	MS % REC #	QC LIMITS REC.
GAMMA-BHC	.33	.00	.37	111.	56-123
HEPTACHLOR	.33	.00	.32	96.	40-131
ALDRIN	.33	.00	.28	85.	40-120
DIELDRIN	.83	.00	.86	103.	52-126
ENDRIN	.83	.00	.85	102.	56-121
4,4'-DDT	.83	.00	.63	76.	38-127

COMPOUND	SPIKE ADDED (UG/L)	MSD CONCENTRATION (UG/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
GAMMA-BHC	.33	.38	113.	1.	19	56-123
HEPTACHLOR	.33	.32	97.	1.	20	40-131
ALDRIN	.33	.31	94.	10.	22	40-120
DIELDRIN	.83	.90	108.	5.	18	52-126
ENDRIN	.83	.90	107.	6.	21	56-121
4,4'-DDT	.83	.64	77.	2.	27	38-127

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: 0 out of 12 outside limits

COMMENTS:

FORM III PEST-1 1/87 Rev.

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4C

PESTICIDE METHOD BLANK SUMMARY

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Lab Sample ID: _____

Lab File ID: 1214PWB

Matrix: (soil/water) WATER

Level: (low/med) LOW

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed (1): 1/ 6/88

Date Analyzed (2):

Time Analyzed (1): 1:46

Time Analyzed (2):

Instrument ID (1): 5890A

Instrument ID (2):

GC Column ID (1): MULTIPHA - QUANTITATION

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
1	FD732		1/ 6/88	
2	FD732MS		1/ 6/88	
3	FD732MSD		1/ 6/88	
4	FD733		1/ 6/88	
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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23				
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25				
26				

Comments:

Page 1 of 1

FORM IV PEST

1/87 Rev.

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 710. (g/mL) ML Lab File ID: 164210

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec. 0. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/ 6/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	ALPHA-BHC	.07	U
319-85-7	BETA-BHC	.07	U
319-86-8	DELTA-BHC	.07	U
58-89-9	GAMMA-BHC	.07	U
76-44-8	HEPTACHLOR	.07	U
309-00-2	ALDRIN	.07	U
1024-57-3	HEPTACHLOR EPOXIDE	.07	U
959-98-8	ENDOSULFAN I	.07	U
60-57-1	DIELDRIN	.1	U
72-55-9	4,4'-DDE	.1	U
72-20-8	ENDRIN	.1	U
33213-65-9	ENDOSULFAN II	.1	U
72-54-8	4,4'-DDD	.1	U
1031-07-8	ENDOSULFAN SULFATE	.1	U
50-29-3	4,4'-DDT	.1	U
72-43-5	METHOXYCHLOR	.7	U
53494-70-5	ENDRIN KETONE	1.	U
5103-71-9	ALPHA CHLORDANE	.7	U
5103-74-2	GAMMA CHLORDANE	.7	U
8001-35-2	TOXAPHENE	1.	U
12674-11-2	AROCLOR-1016	.7	U
11104-28-2	AROCLOR-1221	.7	U
11141-16-5	AROCLOR-1232	.7	U
53469-21-9	AROCLOR-1242	.7	U
12672-29-6	AROCLOR-1248	.7	U
11097-69-1	AROCLOR-1254	1.	U
11096-82-5	AROCLOR-1260	1.	U

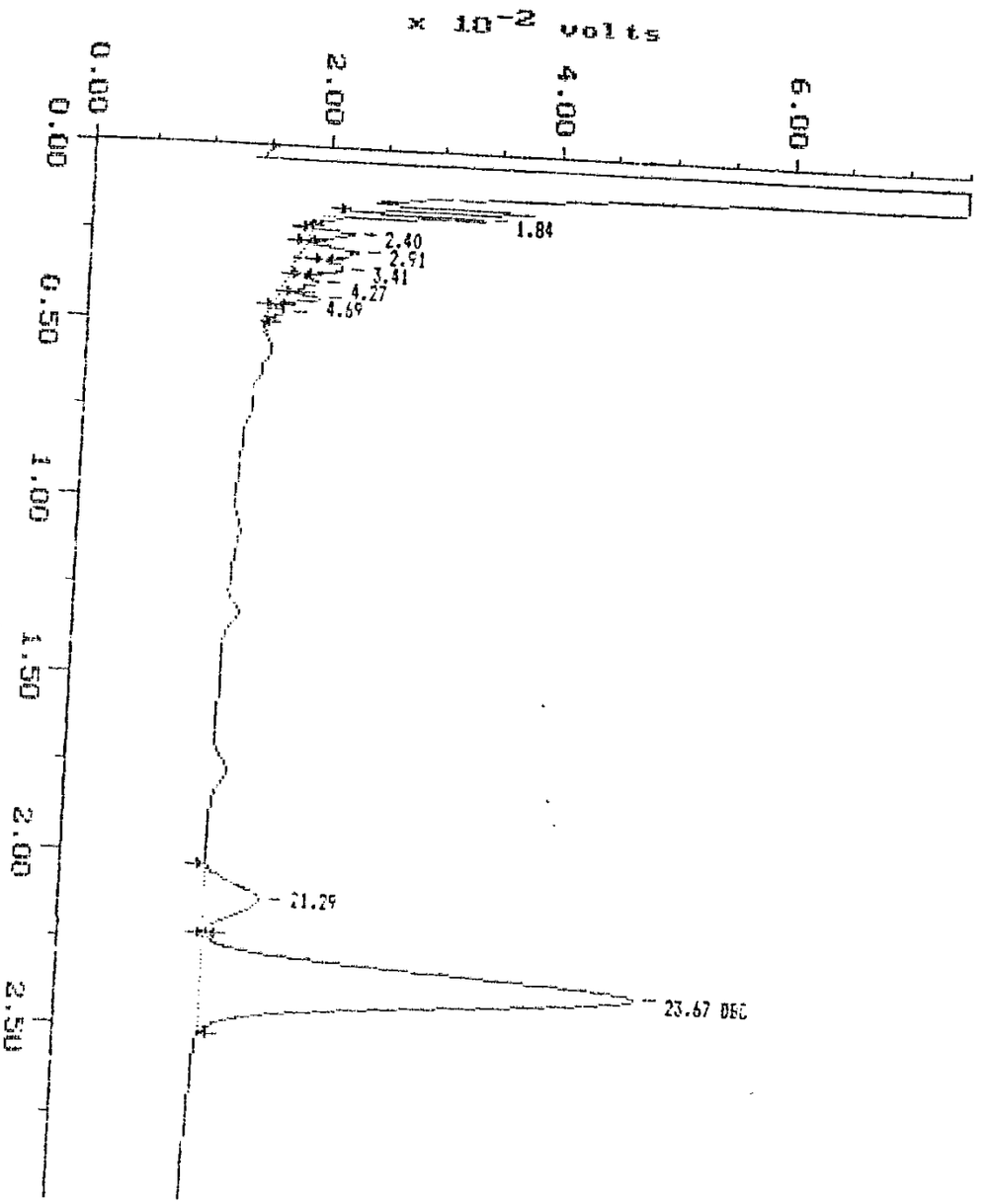
006192

FORM I PEST 1/87 Rev.

Sample: FD732
Acquired: 06-JAN-86 2:28
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 710.000

Filename: 16421
Operator: JDH
Inj Vol: 5.00



006193

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The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 15:16:10

SAMPLE: FD732

#15 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 2:28
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: UNKN
Instrument: HP 5890 A
Filename: 16421
Index: Disk
Injection Volume: 5.000
Dilution: 1.000
Amount: 710.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Original Conc (ug/L)	Component Name
1		1.842	88489	12526				
2		2.400	48334	3852				
3		2.906	102627	5033				
4		3.495	88798	4456				
5	6	3.800	55741	2855	EXT	0.915#	0.013#	ALDRIN BELOW CAL
6		4.267	58933	3709				
7		4.692	20425	1386				
8		21.292	271445	4840				
9	19	23.667	2495913	37571	EXT	58.155#	0.819#	DBC
TOTAL			3222795	76227		59.070#		

Result calculation was based on a manually entered response factor.

006194

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006194

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD733

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 1110. (g/mL)ML Lab File ID: 16422

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec. 0. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/ 6/88

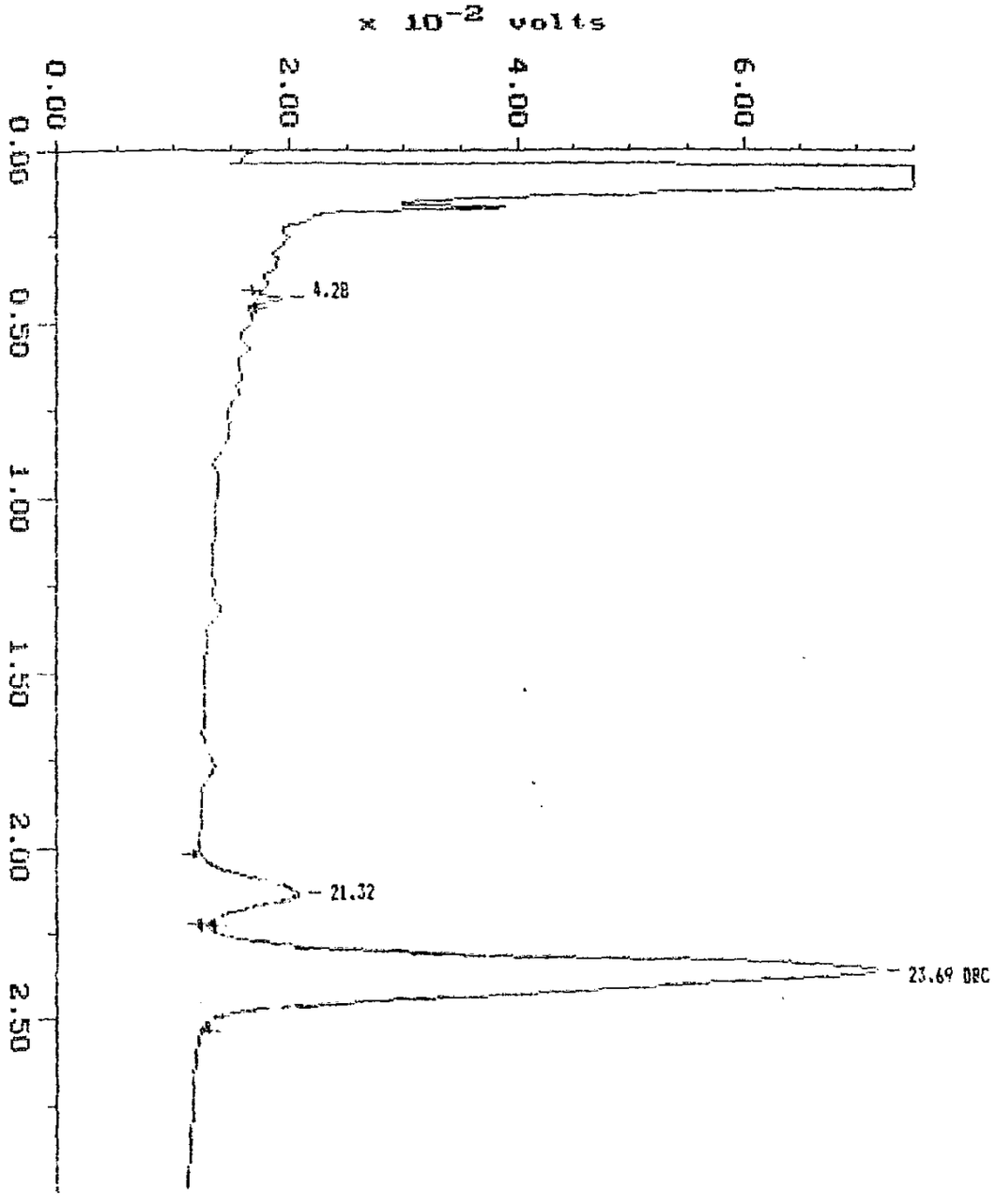
GPC Cleanup: (Y/N) N pH: 6.3 Dilution Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	ALPHA-BHC	.05	U
319-85-7	BETA-BHC	.05	U
319-86-8	DELTA-BHC	.05	U
58-89-9	GAMMA-BHC	.05	U
76-44-8	HEPTACHLOR	.05	U
309-00-2	ALDRIN	.05	U
1024-57-3	HEPTACHLOR EPOXIDE	.05	U
959-98-8	ENDOSULFAN I	.05	U
60-57-1	DIELDRIN	.09	U
72-55-9	4,4'-DDE	.09	U
72-20-8	ENDRIN	.09	U
33213-65-9	ENDOSULFAN II	.09	U
72-54-8	4,4'-DDD	.09	U
1031-07-8	ENDOSULFAN SULFATE	.09	U
50-29-3	4,4'-DDT	.09	U
72-43-5	METHOXYCHLOR	.5	U
53494-70-5	ENDRIN KETONE	.9	U
5103-71-9	ALPHA CHLORDANE	.5	U
5103-74-2	GAMMA CHLORDANE	.5	U
8001-35-2	TOXAPHENE	.9	U
12674-11-2	AROCLOR-1016	.5	U
11104-28-2	AROCLOR-1221	.5	U
11141-16-5	AROCLOR-1232	.5	U
53469-21-9	AROCLOR-1242	.5	U
12672-29-6	AROCLOR-1248	.5	U
11097-69-1	AROCLOR-1254	.9	U
11096-82-5	AROCLOR-1260	.9	U

006195

FORM I PEST 1/87 Rev.

Sample: F0733 Channel: HP5890A Filename: 16422
Acquired: 06-JAN-88 4:33 Method: QUANT RUN - MULTIPHASE COL. Operator: JDH
Dilution: 1 : 1.000 Amounts: 1110.000 Inj Vol: 0.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN



006196

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 15:24:31

SAMPLE: F5733

#18 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 4:33
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: UNKN
Instrument: HP 5890 A
Filename: 16422
Index: Disk
Injection Volume: 5.000
Dilution: 1.000
Amount: 1110.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Original Conc (ug/L)	Component Name
1		4.275	23548	2197				
2		21.317	497235	8608				
3	19	23.692	4008354	59700	EXT	93.395*	0.841*	DBC
*TOTAL			4529137	70505		93.395*		

* Result calculation was based on a manually entered response factor.

006197

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8D
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 5890A

GC Column ID: MULTIPHA -QUANTITATION

Dates of Analyses: 1/ 5/88 to 1/ 6/88

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN	11049520.	11586770.	11776250.	3.3	
ENDRIN	7838440.	7860780.	7902460.	.4	
4,4'-DDT	7459264.	7732316.	8277518.	5.3	(1)
DBC	7633404.	8003386.	8014011.	2.7	

(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)
1	INITIAL EVAL MIX B	1/ 5/88	17:25	6.51	7.37	.00
2	EVAL MIX B	1/ 6/88	5:15	8.22	8.84	.00
3	EVAL MIX B	1/ 6/88	13:38	2.83	5.84	.00
4						
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13						
14						

(2) See Form instructions.

006198

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 5890A GC Column ID: MULTIPHA - QUANTITATION

Dates of Analyses: 1/ 5/88 to 1/ 6/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
1	EVALA		1/ 5/88	16:52	.3	
2	EVALB		1/ 5/88	17:25	.5	
3	EVALC		1/ 5/88	18:07	1.0	
4	INDA		1/ 5/88	18:49	.5	
5	INDB		1/ 5/88	19:30	.1	
6	TOXAPH		1/ 5/88	20:12	.5	
7	AR1016		1/ 5/88	20:54	.5	
8	AR1221		1/ 5/88	21:36	.5	
9	AR1232		1/ 5/88	22:17	.5	
10	AR1242		1/ 5/88	22:59	.5	
11	AR1248		1/ 5/88	23:41	.5	
12	AR1254		1/ 6/88	0:23	.5	
13	AR1260		1/ 6/88	1:05	.5	
14	PBLK		1/ 6/88	1:46	.0	
15	FD732		1/ 6/88	2:28	.2	
16	FD732MS		1/ 6/88	3:10	.1	
17	FD732MSD		1/ 6/88	3:52	.2	
18	FD733		1/ 6/88	4:33	.3	
19	EVALB		1/ 6/88	5:15	.1	
20	ZZZZZ		1/ 6/88	5:57	.3	
21	ZZZZZ		1/ 6/88	6:39	.2	
22	ZZZZZ		1/ 6/88	7:20	1.3	
23	ZZZZZ		1/ 6/88	8:02	.0	
24	ZZZZZ		1/ 6/88	8:44	.3	
25	INDA		1/ 6/88	9:26	.5	
26	ZZZZZ		1/ 6/88	10:09	.4	
27	ZZZZZ		1/ 6/88	10:42	.4	
28	ZZZZZ		1/ 6/88	11:24	.4	
29	ZZZZZ		1/ 6/88	12:15	.7	
30	ZZZZZ		1/ 6/88	12:48	.5	
31	EVALB		1/ 6/88	13:38	.1	
32	ZZZZZ		1/ 6/88	14:20	.1	
33	ZZZZZ		1/ 6/88	15:00	.0	
34	ZZZZZ		1/ 6/88	15:31	.4	
35	ZZZZZ		1/ 6/88	16:13	.0	
36	ZZZZZ		1/ 6/88	16:54	.2	
37	INDB		1/ 6/88	17:36	.3	
38	ZZZZZ		1/ 6/88	18:18	.5	
39	ZZZZZ		1/ 6/88	19:00	.1	
40	ZZZZZ		1/ 6/88	19:41	.2	
41	ZZZZZ		1/ 6/88	20:23	.5	
42	INDA		1/ 6/88	21:05	.1	
43	INDB		1/ 6/88	21:47	.2	

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

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9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Instrument ID: 5890A GC Column ID: MULTIPHA - QUANTITATION

DATE(S) OF ANALYSIS	FROM: 1/ 5/88 TO: 1/ 6/88	DATE OF ANALYSIS	1/ 6/88
TIME(S) OF ANALYSIS	FROM: 18:49 TO: 1:05	TIME OF ANALYSIS	9:26
		EPA SAMPLE NO. (STANDARD)	INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
ALPHA-BHC ___	2.03	1.95	2.11	12532320.			Y	
BETA-BHC_____	2.84	2.74	2.94	6053870.			Y	
DELTA-BHC ___	3.31	3.21	3.41	11540470.			Y	
GAMMA-BHC ___	2.53	2.47	2.59	11679220.	2.53	10868660.	Y	6.9
HEPTACHLOR___	3.09	2.99	3.19	12722040.	3.08	11253940.	Y	11.5
ALDRIN_____	3.71	3.59	3.83	12183180.	3.69	11206230.	Y	8.0
Hept. Epoxide	5.43	5.28	5.58	11625350.	5.40	10960890.	Y	5.7
ENDOSULFAN I_	6.78	6.60	6.96	11202090.	6.75	10201970.	Y	8.9
DIELDRIN_____	8.22	8.00	8.44	10515820.	8.18	9912039.	Y	5.7
4,4'-DDE_____	7.66	7.51	7.81	10442720.			Y	
ENDRIN_____	9.93	9.73	10.13	7947684.			Y	
ENDOSULFAN II	11.90	11.60	12.20	10766250.	11.85	10218640.	Y	5.1
4,4'-DDD_____	11.51	11.29	11.73	8249112.			Y	
Endo. sulfate	18.38	18.03	18.73	9562571.			Y	
4,4'-DDT_____	13.82	13.46	14.18	6854496.	13.77	6300360.	Y	8.1
METHOXYCHLOR_	25.71	25.16	26.26	4786236.	25.63	4379896.	Y	8.5
ENDRIN KETONE	24.99	24.44	25.54	12203260.			Y	
Alpha. Chlordane	5.99	5.89	6.09	12202880.			Y	
Gamma. Chlordane	6.53	6.43	6.63	12727910.			Y	
TOXAPHENE ___	14.55	14.35	14.75	3529016.			Y	
AROCLOR-1016_	3.03	2.98	3.08	3063868.			Y	
AROCLOR-1221_	1.88	1.78	1.98	490879.			Y	
AROCLOR-1232_	3.03	2.93	3.13	2231783.			Y	
AROCLOR-1242_	5.50	5.40	5.60	3967600.			Y	
AROCLOR-1248_	5.51	5.41	5.61	4483765.			Y	
AROCLOR-1254_	9.55	9.45	9.65	4747537.			Y	
AROCLOR-1260_	20.98	20.88	21.08	6528852.			Y	

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 quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single 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.

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8635 SAS No.: SDG No.: FD732

Instrument ID: 5890A

GC Column ID: MULTIPHA - Quantitation

DATE(S) OF ANALYSIS	FROM:	1/ 5/88		DATE OF ANALYSIS		1/ 6/88		
	TO:	1/ 6/88		TIME OF ANALYSIS		21:05		
TIME(S) OF ANALYSIS	FROM:	18:49		EPA SAMPLE NO. (STANDARD)		INDA		
	TO:	1:05						

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
ALPHA-BHC	2.03	1.95	2.11	12532320.			Y	
BETA-BHC	2.84	2.74	2.94	6053870.			Y	
DELTA-BHC	3.31	3.21	3.41	11540470.			Y	
GAMMA-BHC	2.53	2.47	2.59	11679220.	2.54	12054580.	Y	3.2
HEPTACHLOR	3.09	2.99	3.19	12722040.	3.09	12596400.	Y	1.0
ALDRIN	3.71	3.59	3.83	12183180.	3.72	12312470.	Y	1.1
Hept. Epoxide	5.43	5.28	5.58	11625350.	5.43	11824470.	Y	1.7
ENDOSULFAN I	6.78	6.60	6.96	11202090.	6.79	11227520.	Y	.2
DIELDRIN	8.22	8.00	8.44	10515820.	8.23	10823940.	Y	2.9
4,4'-DDE	7.66	7.51	7.81	10442720.			Y	
ENDRIN	9.93	9.73	10.13	7947684.			Y	
ENDOSULFAN II	11.90	11.60	12.20	10766250.	11.91	11611240.	Y	7.8
4,4'-DDD	11.51	11.29	11.73	8249112.			Y	
Endo. sulfate	18.38	18.03	18.73	9562571.			Y	
4,4'-DDT	13.82	13.46	14.18	6854496.	13.85	6392972.	Y	6.7
METHOXYCHLOR	25.71	25.16	26.26	4786236.	25.76	4546466.	Y	5.0
ENDRIN KETONE	24.99	24.44	25.54	12203260.			Y	
a. Chlordane	5.99	5.89	6.09	12202880.			Y	
b. Chlordane	6.53	6.43	6.63	12727910.			Y	
TOXAPHENE	14.55	14.35	14.75	3529016.			Y	
AROCLOR-1016	3.03	2.98	3.08	3063868.			Y	
AROCLOR-1221	1.88	1.78	1.98	490879.			Y	
AROCLOR-1232	3.03	2.93	3.13	2231783.			Y	
AROCLOR-1242	5.50	5.40	5.60	3967600.			Y	
AROCLOR-1248	5.51	5.41	5.61	4483765.			Y	
AROCLOR-1254	9.55	9.45	9.65	4747537.			Y	
AROCLOR-1260	20.98	20.88	21.08	6528852.			Y	

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 quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single 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.

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PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8635 SAS No.: SDG No.: FD732

Instrument ID: 5890A GC Column ID: MULTIPHA -QUANTITATION

DATE(S) OF ANALYSIS	FROM: 1/ 5/88 TO: 1/ 6/88	DATE OF ANALYSIS	1/ 6/88
TIME(S) OF ANALYSIS	FROM: 18:49 TO: 1:05	TIME OF ANALYSIS	17:36
		EPA SAMPLE NO. (STANDARD)	INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
ALPHA-BHC ___	2.03	1.95	2.11	12532320.	2.04	12525320.	Y	.1
BETA-BHC_____	2.84	2.74	2.94	6053870.	2.85	5700290.	Y	5.8
DELTA-BHC ___	3.31	3.21	3.41	11540470.	3.32	11644870.	Y	.9
GAMMA-BHC ___	2.53	2.47	2.59	11679220.			Y	
HEPTACHLOR___	3.09	2.99	3.19	12722040.			Y	
ALDRIN_____	3.71	3.59	3.83	12183180.	3.72	11998280.	Y	1.5
Hept. Epoxide	5.43	5.28	5.58	11625350.			Y	
ENDOSULFAN I_	6.78	6.60	6.96	11202090.			Y	
DIELDRIN_____	8.22	8.00	8.44	10515820.			Y	
4,4'-DDE_____	7.66	7.51	7.81	10442720.	7.68	9958739.	Y	4.6
ENDRIN_____	9.93	9.73	10.13	7947684.	9.96	8950495.	Y	12.6
ENDOSULFAN II	11.90	11.60	12.20	10766250.			Y	
4,4'-DDD_____	11.51	11.29	11.73	8249112.	11.56	8129072.	Y	1.5
Endo. sulfate	18.38	18.03	18.73	9562571.	18.43	9308831.	Y	2.7
4,4'-DDT_____	13.82	13.46	14.18	6854496.			Y	
METHOXYCHLOR_	25.71	25.16	26.26	4786236.			Y	
ENDRIN KETONE	24.99	24.44	25.54	12203260.	25.06	11806780.	Y	3.2
Alpha. Chlordane	5.99	5.89	6.09	12202880.	6.02	11700280.	Y	4.1
Gamma. Chlordane	6.53	6.43	6.63	12727910.	6.54	11913170.	Y	6.4
TOXAPHENE ___	14.55	14.35	14.75	3529016.			Y	
AROCLOR-1016_	3.03	2.98	3.08	3063868.			Y	
AROCLOR-1221_	1.88	1.78	1.98	490879.			Y	
AROCLOR-1232_	3.03	2.93	3.13	2231783.			Y	
AROCLOR-1242_	5.50	5.40	5.60	3967600.			Y	
AROCLOR-1248_	5.51	5.41	5.61	4483765.			Y	
AROCLOR-1254_	9.55	9.45	9.65	4747537.			Y	
AROCLOR-1260_	20.98	20.88	21.08	6528852.			Y	

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 quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single 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.

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PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8635 SAS No.: SDG No.: FD732

Instrument ID: 5890A GC Column ID: MULTIPHA - QUANTITATION

	DATE(S) OF ANALYSIS FROM: 1/ 5/88 TO: 1/ 6/88	TIME(S) OF ANALYSIS FROM: 18:49 TO: 1:05	DATE OF ANALYSIS 1/ 6/88	TIME OF ANALYSIS 21:47	EPA SAMPLE NO. (STANDARD) INDB	

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
ALPHA-BHC ___	2.03	1.95	2.11	12532320.	2.03	12883180.	Y	2.8
BETA-BHC_____	2.84	2.74	2.94	6053870.	2.85	5897770.	Y	2.6
DELTA-BHC ___	3.31	3.21	3.41	11540470.	3.32	11896090.	Y	3.1
GAMMA-BHC ___	2.53	2.47	2.59	11679220.	_____	_____	Y	_____
HEPTACHLOR___	3.09	2.99	3.19	12722040.	_____	_____	Y	_____
ALDRIN_____	3.71	3.59	3.83	12183180.	3.72	12331680.	Y	1.2
Hept. Epoxide	5.43	5.28	5.58	11625350.	_____	_____	Y	_____
ENDOSULFAN I_	6.78	6.60	6.96	11202090.	_____	_____	Y	_____
DIELDRIN_____	8.22	8.00	8.44	10515820.	_____	_____	Y	_____
4,4'-DDE_____	7.66	7.51	7.81	10442720.	7.68	10119800.	Y	3.1
ENDRIN_____	9.93	9.73	10.13	7947684.	9.95	8738255.	Y	9.9
DOSULFAN II	11.90	11.60	12.20	10766250.	_____	_____	Y	_____
4'-DDD_____	11.51	11.29	11.73	8249112.	11.54	8187288.	Y	.7
Endo. sulfate	18.38	18.03	18.73	9562571.	18.42	9306739.	Y	2.7
4,4'-DDT_____	13.82	13.46	14.18	6854496.	_____	_____	Y	_____
METHOXYCHLOR_	25.71	25.16	26.26	4786236.	_____	_____	Y	_____
ENDRIN KETONE	24.99	24.44	25.54	12203260.	25.05	11877940.	Y	2.7
a. Chlordane	5.99	5.89	6.09	12202880.	6.01	11830690.	Y	3.0
g. Chlordane	6.53	6.43	6.63	12727910.	6.54	12206550.	Y	4.1
TOXAPHENE ___	14.55	14.35	14.75	3529016.	_____	_____	Y	_____
AROCLOR-1016_	3.03	2.98	3.08	3063868.	_____	_____	Y	_____
AROCLOR-1221_	1.88	1.78	1.98	490879.	_____	_____	Y	_____
AROCLOR-1232_	3.03	2.93	3.13	2231783.	_____	_____	Y	_____
AROCLOR-1242_	5.50	5.40	5.60	3967600.	_____	_____	Y	_____
AROCLOR-1248_	5.51	5.41	5.61	4483765.	_____	_____	Y	_____
AROCLOR-1254_	9.55	9.45	9.65	4747537	_____	_____	Y	_____
AROCLOR-1260_	20.98	20.88	21.08	6528852.	_____	_____	Y	_____

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 quantitation, and less than or equal to 20.0% for confirmation.

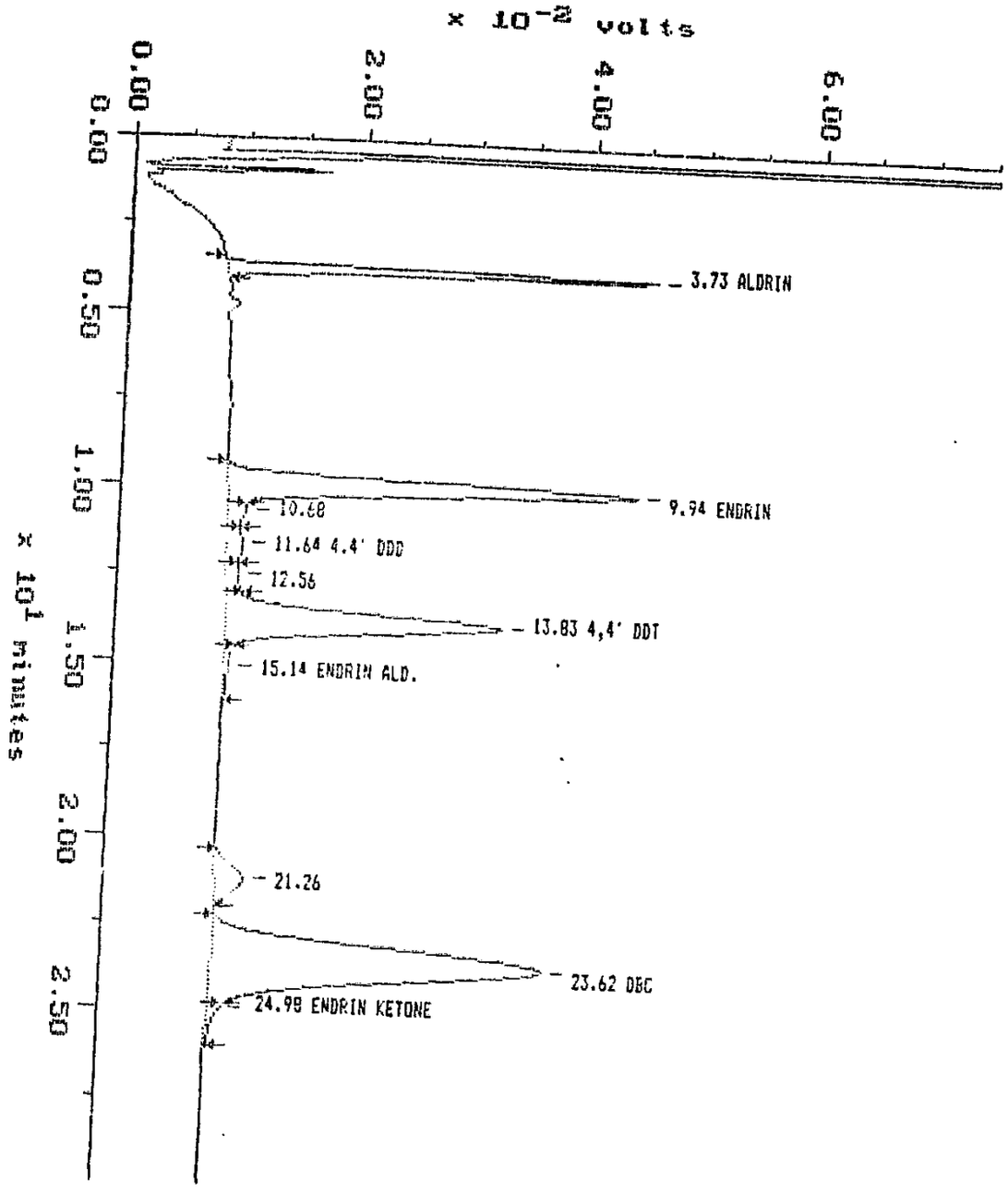
Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the largest single 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.

Sample: EVALA
Acquired: 05-JAN-88 16:52
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 01038EA
Operator: JDH



006204

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:34:11

SAMPLE: EV4LA

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 16:52
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 01053EA
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	6	3.725	414357	37590	EXT	7.500	37.500	ALDRIN
2	13	9.942	979805	35749	EXT	25.000	125.000	ENDRIN
3		10.683	58284	1580				
4	14	11.642	75126	1362	EXT	0.000	0.000	4,4' DDD
5		12.556	53935	977				
6	16	13.833	932408	23924	EXT	25.000	125.000	4,4' DDT
7	17	15.142	31743	404	EXT	0.000	0.000	ENDRIN ALD.
8		21.258	121630	2309				
9	19	23.617	1906351	28633	EXT	50.000	250.000	DBC
10	20	24.975	32495	993	EXT	0.000	0.000	ENDRIN KETONE
TOTAL			4608135	133519		107.500	537.500	

006205

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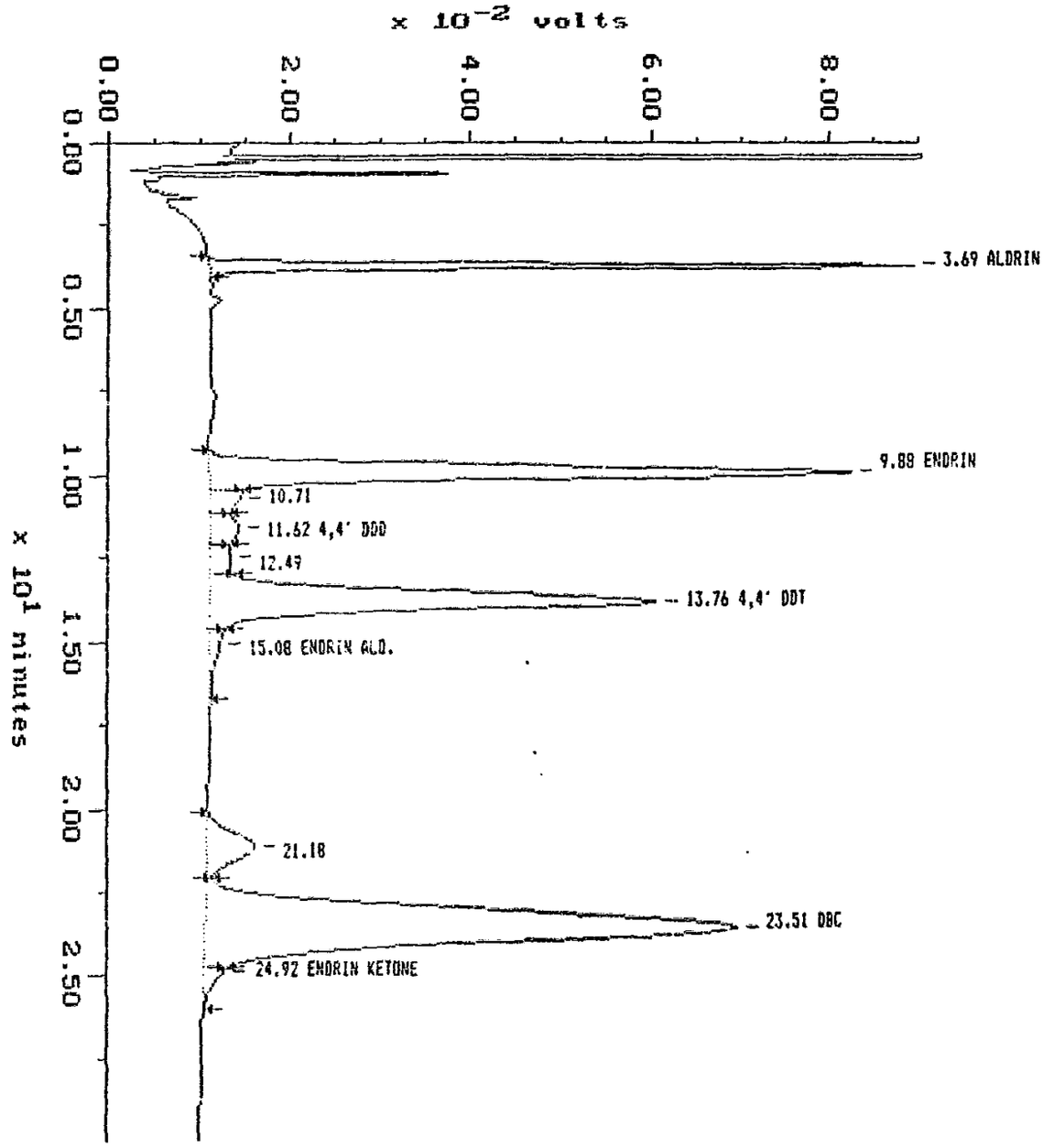
006205

Sample: EVALB
Acquired: 05-JAN-88 17:25
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105BEB
Operator: JDH



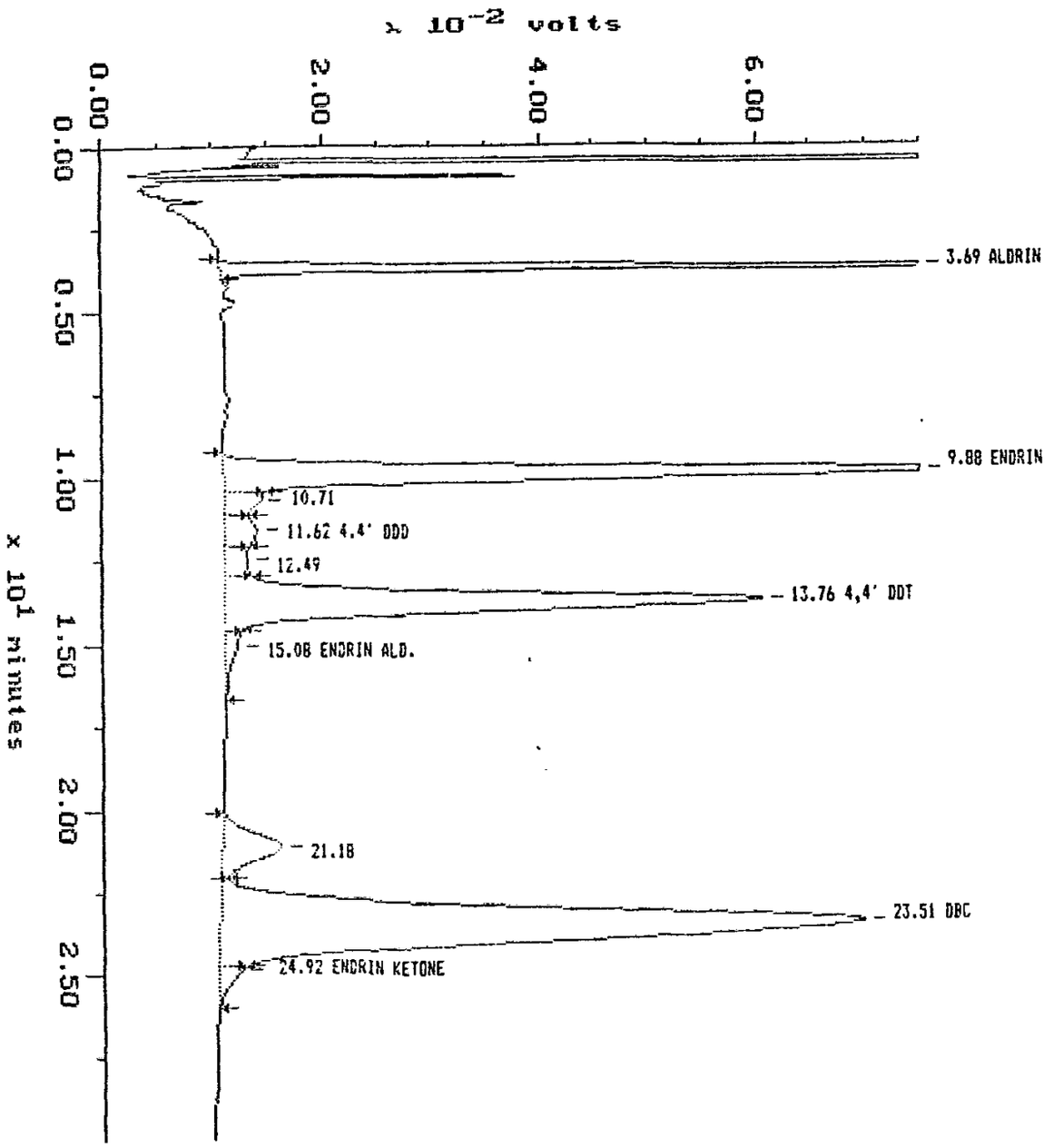
006206

006207

Sample: EVALB
Acquired: 05-JAN-88 17:25
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105BEB
Operator: JDH



006207

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:35:49

SAMPLE: EVALB

#2 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 17:25
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 01058EB
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	6	3.692	869008	78649	EXT	15.000	75.000	ALDRIN
2	13	9.883	1965195	71784	EXT	50.000	250.000	ENDRIN
3		10.708	130523	3395				
4	14	11.617	153834	3013	EXT	0.000	0.000	4,4' DDD
5		12.492	118596	2159				
6	16	13.758	1933079	49615	EXT	50.000	250.000	4,4' DDT
7	17	15.075	69506	1076	EXT	0.000	0.000	ENDRIN ALD.
8		21.175	310909	5356				
9	19	23.308	4001693	59223	EXT	100.000	500.000	DBC
10	20	24.917	67381	2081	EXT	0.000	0.000	ENDRIN KETONE
TOTAL			9619724	276350		215.000	1075.000	

006208

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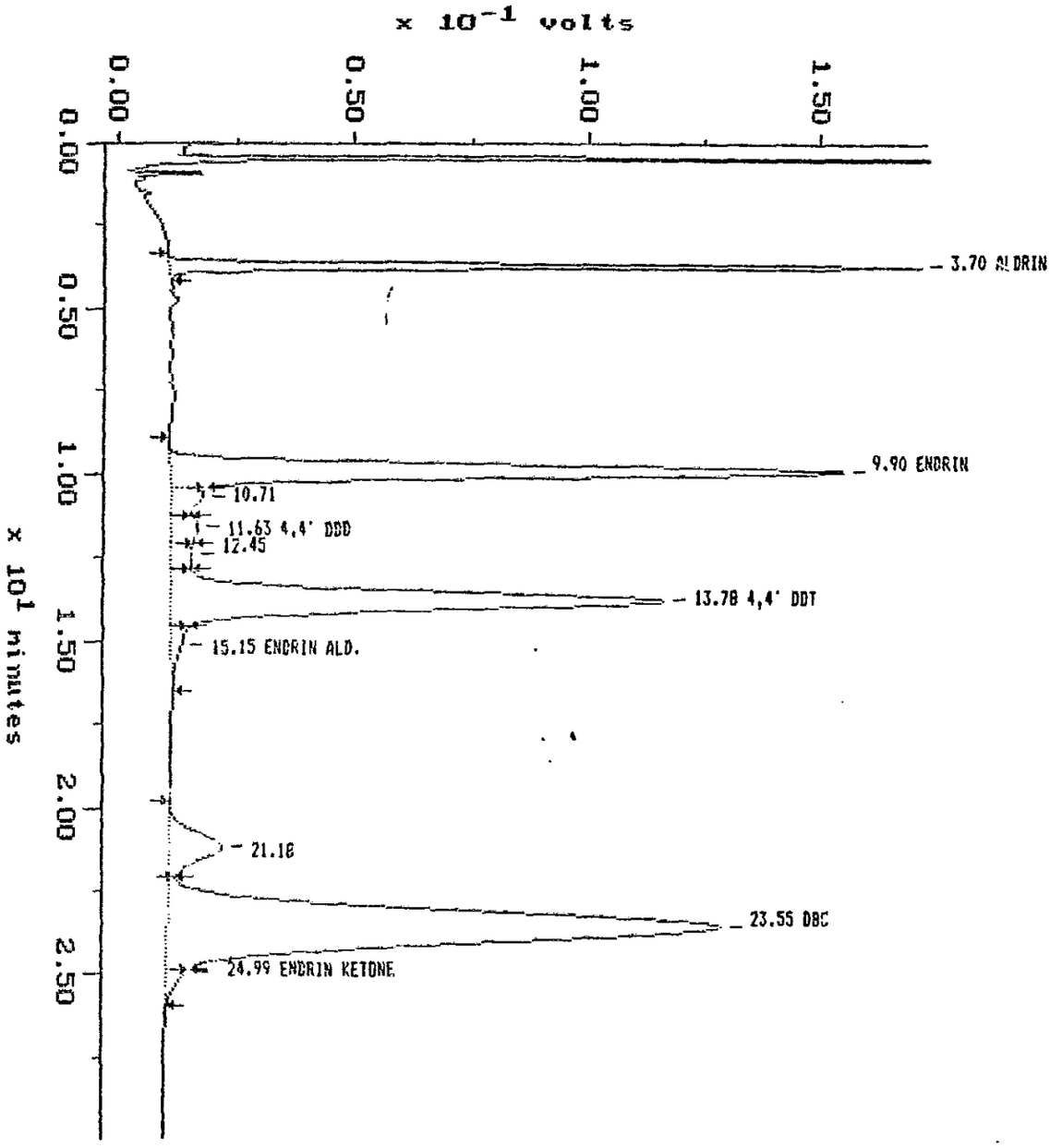
006208

Sample: EVALC
Acquired: 05-JAN-88 18:07
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 01058EC
Operator: JDH



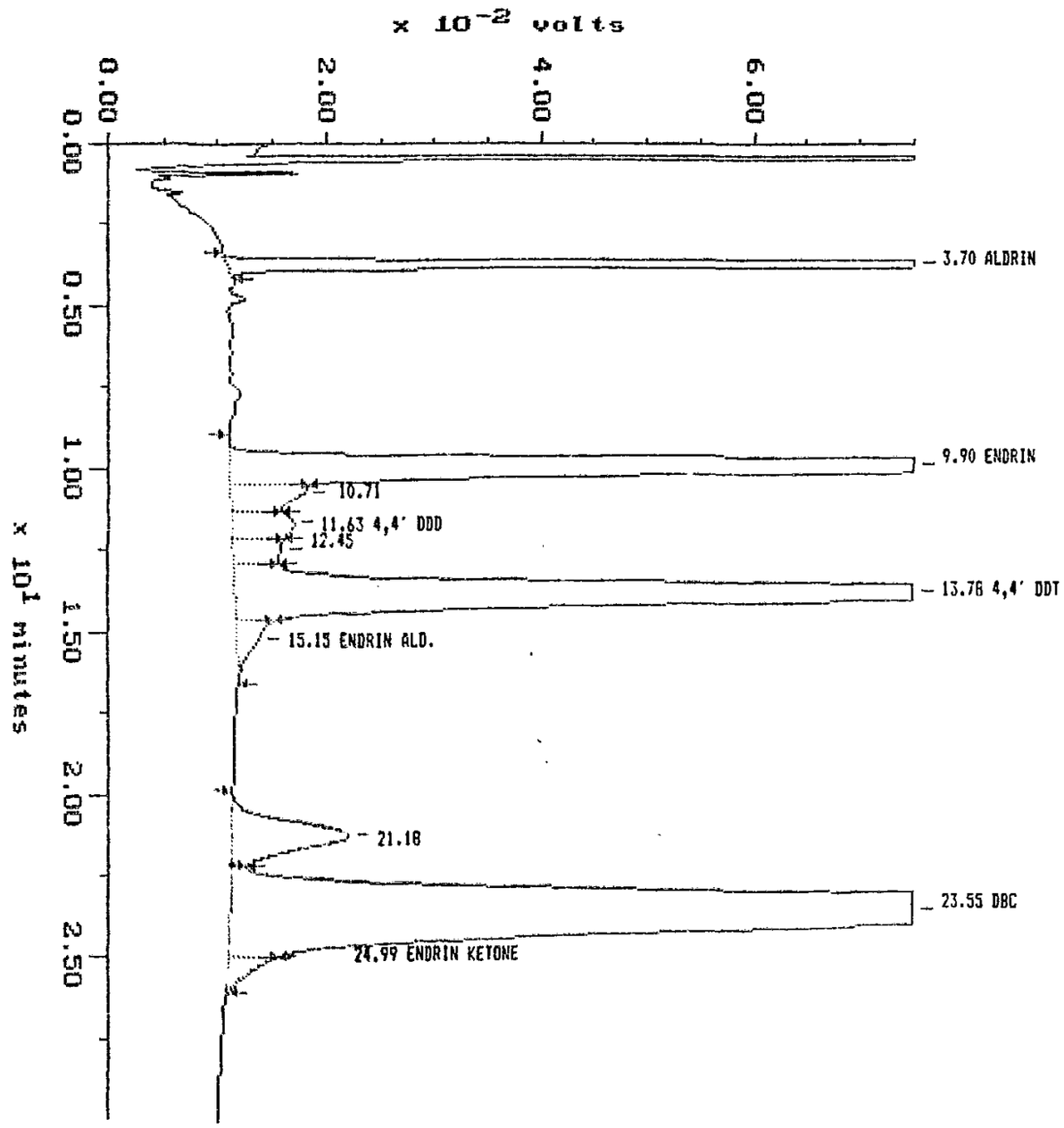
006209

006210

Sample: EVALC
Acquired: 05-JAN-88 18:07
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 01058EC
Operator: JDH



006210

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:37:13

SAMPLE: EVALC

#3 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 18:07
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 01058EC
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

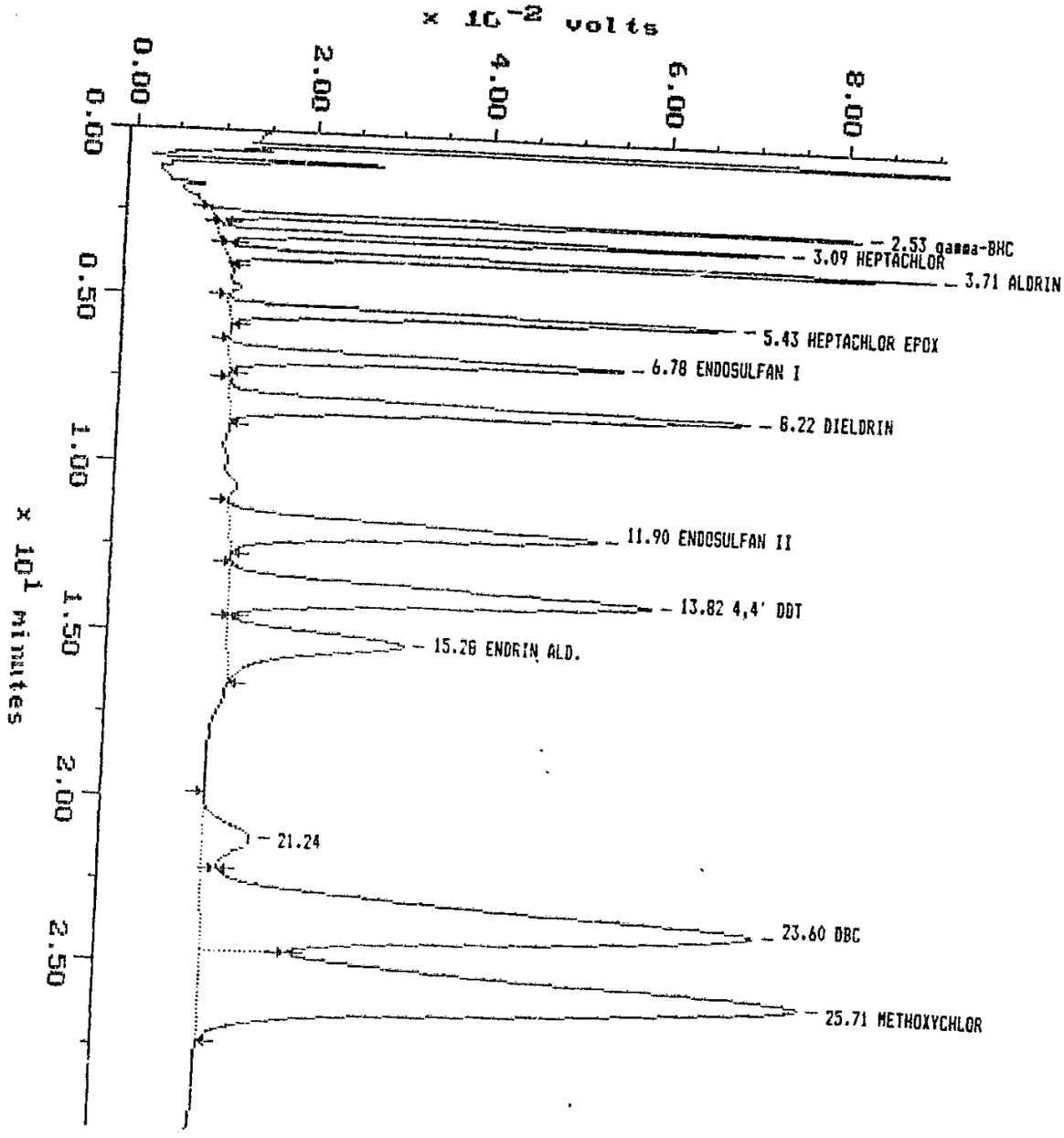
Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	6	3.700	1766438	160873	EXT	30.000	150.000	ALDRIN
2	13	9.900	3951230	144357	EXT	100.000	500.000	ENDRIN
3		10.708	270699	6750				
4	14	11.625	270159	5608	EXT	0.000	0.000	4,4' DDD
5		12.450	190842	4423				
6	16	13.783	4138759	105509	EXT	100.000	500.000	4,4' DDT
7	17	15.150	151131	2111	EXT	0.000	0.000	ENDRIN ALD.
8		21.183	649563	10946				
9	19	23.550	8014011	116005	EXT	200.000	1000.000	DBC
10	20	24.992	118510	3953	EXT	0.000	0.000	ENDRIN KETONE
TOTAL			19521343	562535		430.000	2150.000	

006211

Sample: INDA
Acquired: 05-JAN-88 18:49
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105BIA
Operator: JDH

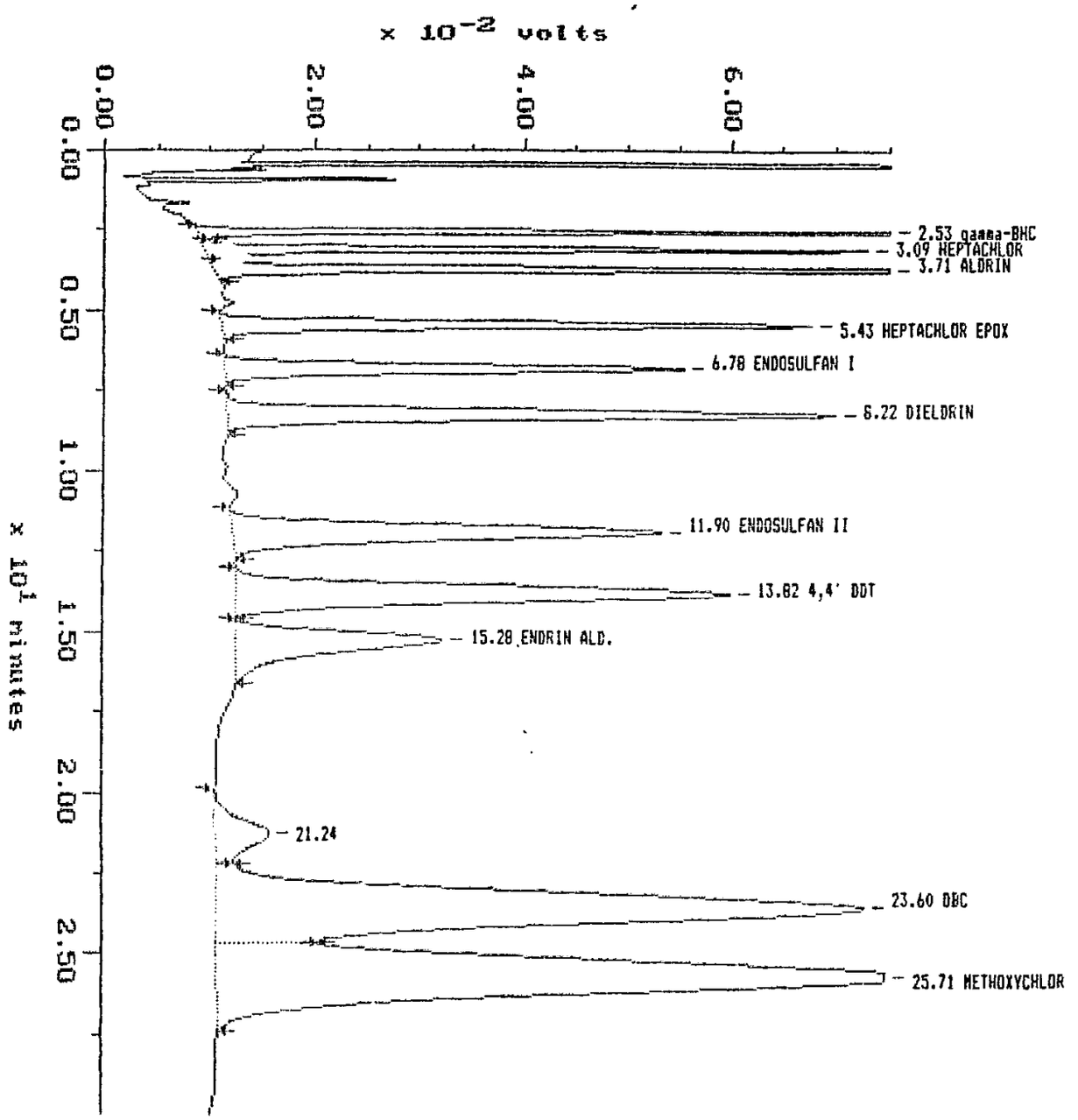


006212

Sample: INDA
Acquired: 05-JAN-88 18:49
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 01058IA
Operator: JSH



006213

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:39:44

SAMPLE: INC4

#4 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 18:49
Rate: 2.00v points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 010581A
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	2	2.533	583961	72986	EXT	10.000	50.000	gamma-BHC
2	4	3.092	636102	63427	EXT	10.000	50.000	HEPTACHLOR
3	6	3.708	893686	79501	EXT	15.000	75.000	ALDRIN
4	7	5.425	871901	56602	EXT	15.000	75.000	HEPTACHLOR EPOX
5	10	6.783	840157	44213	EXT	15.000	75.000	ENDOSULFAN I
6	12	8.217	1314477	58400	EXT	25.000	125.000	DIELDRIN
7	15	11.900	1345781	41308	EXT	25.000	125.000	ENDOSULFAN II
8	16	13.817	1713624	47424	EXT	50.000	250.000	4,4' DDT
9	17	15.275	895356	19801	EXT	25.000	125.000	ENDRIN ALD.
10		21.242	322825	5198				
11	19	23.600	4260452	62149	EXT	100.000	500.000	DBC
12	21	25.708	4786236	67400	EXT	200.000	1000.000	METHOXYCHLOR
TOTAL			18464558	618408		490.000	2450.000	

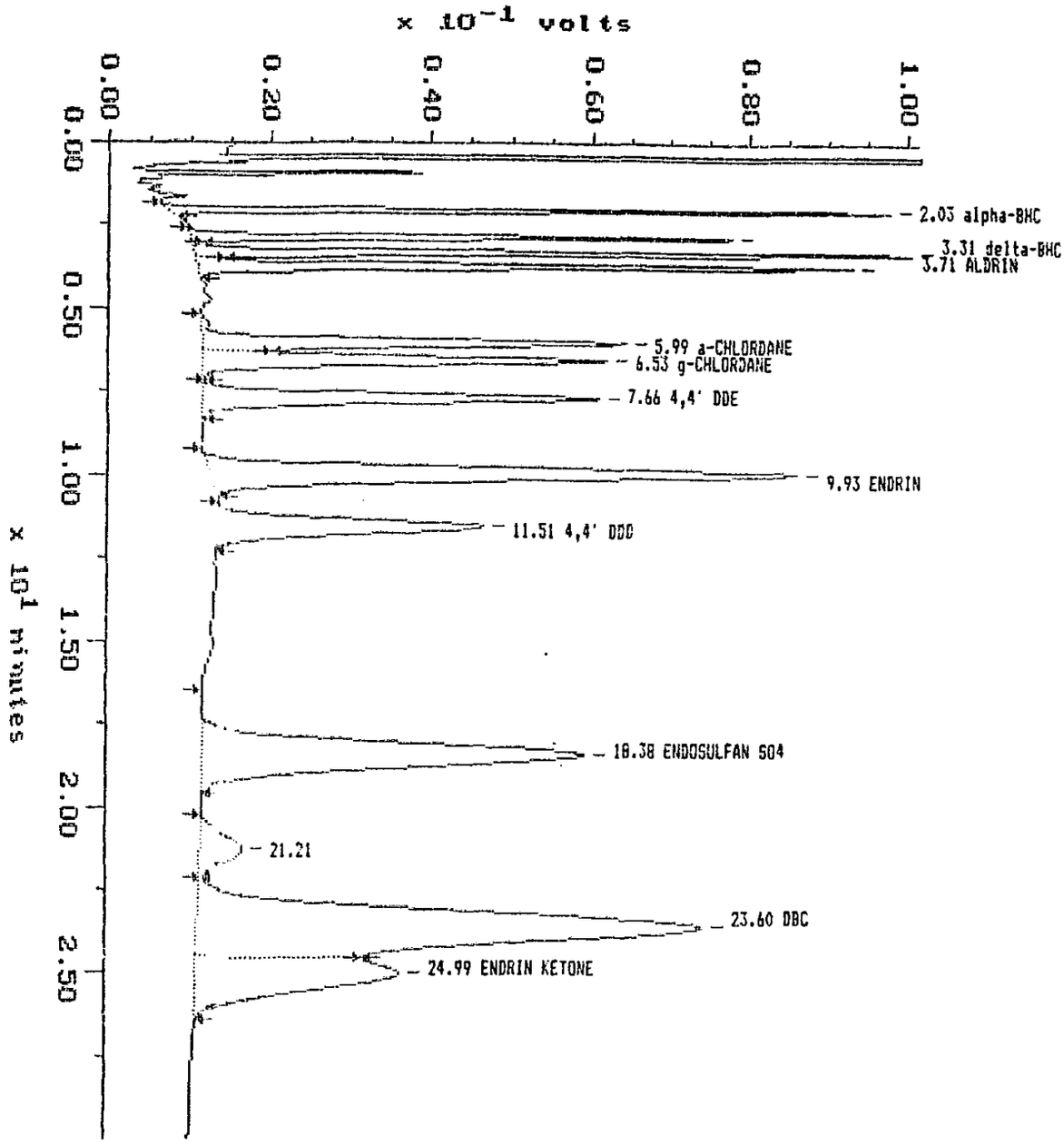
006214

006215

Sample: INDB
Acquired: 05-JAN-88 19:30
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105BIB
Operator: JDH

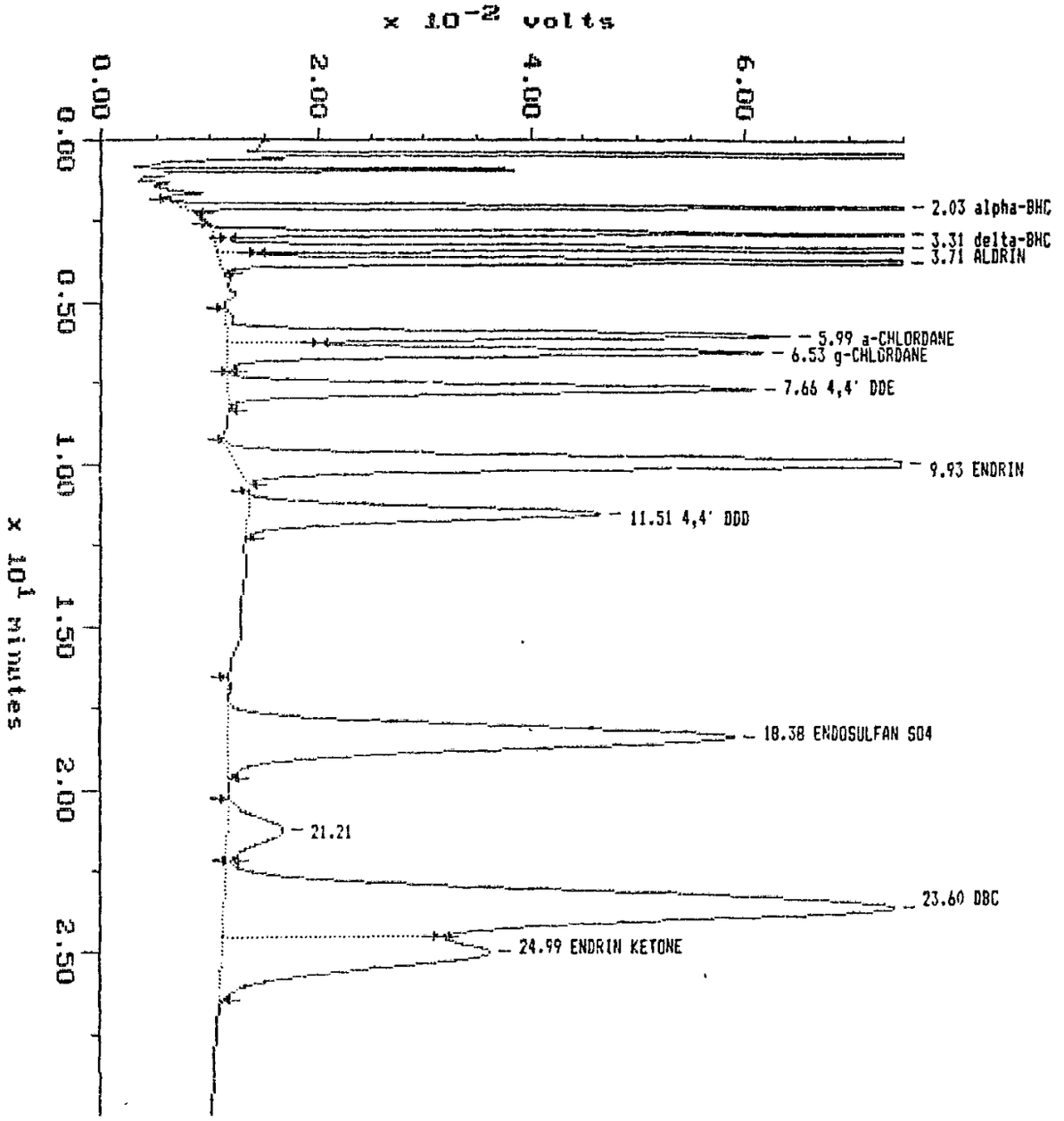


006215

Sample: INDB
Acquired: 05-JAN-88 19:30
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 010581B
Operator: JDH



006216

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:42:33

SAMPLE: INDB

#5 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 19:30
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JBH

Type: STND
Instrument: HP 5890 A
Filename: 010508I8
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	1	2.033	626616	90668	EXT	10.000	50.000	alpha-BHC
2	3	2.242	605387	67741	EXT	20.000	100.000	beta-BHC
3	5	3.308	865535	90019	EXT	15.000	75.000	delta-BHC
4	6	3.708	933791	82388	EXT	15.000	75.000	ALDRIN
5	8	5.992	915216	52961	EXT	15.000	75.000	a-CHLORDANE
6	9	6.525	954593	50572	EXT	15.000	75.000	g-CHLORDANE
7	11	7.658	1044272	49571	EXT	20.000	100.000	4,4' DDE
8	13	9.925	1986921	73829	EXT	50.000	250.000	ENDRIN
9	14	11.508	1031139	33394	EXT	25.000	125.000	4,4' DDD
10	18	18.383	2390643	47631	EXT	50.000	250.000	ENDOSULFAN SO4
11		21.208	300182	5296				
12	19	23.600	4326890	63232	EXT	100.000	500.000	DDC
13	20	24.992	1525408	25398	EXT	25.000	125.000	ENDRIN KETONE
TOTAL			17506591	732720		360.000	1800.000	

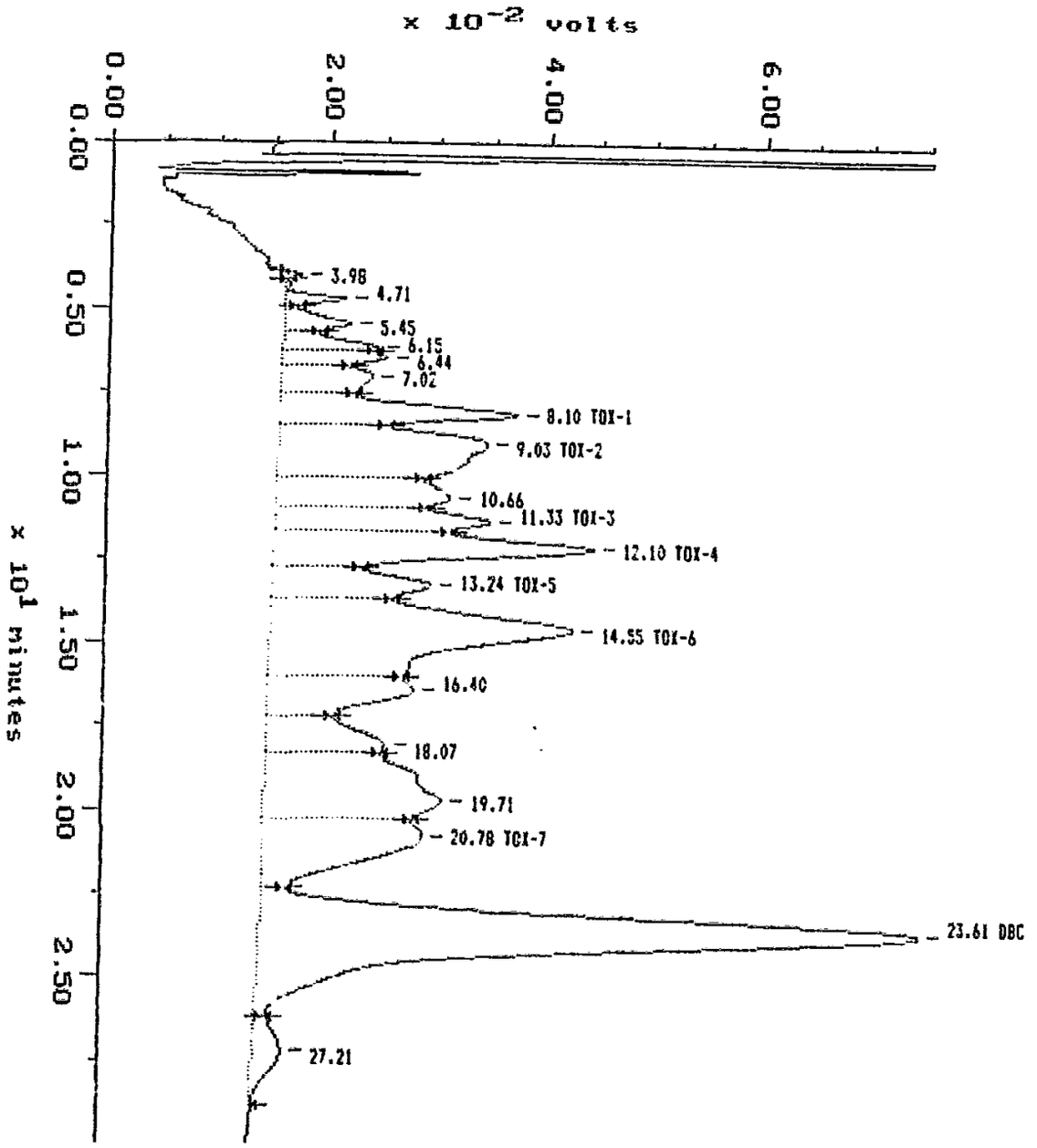
006217

006218

Sample: TOXAPH
Acquired: 05-JAN-88 20:12
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105BTX
Operator: JDH



006218

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 16:05:36

SAMPLE: TOXAPH

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 20:12
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

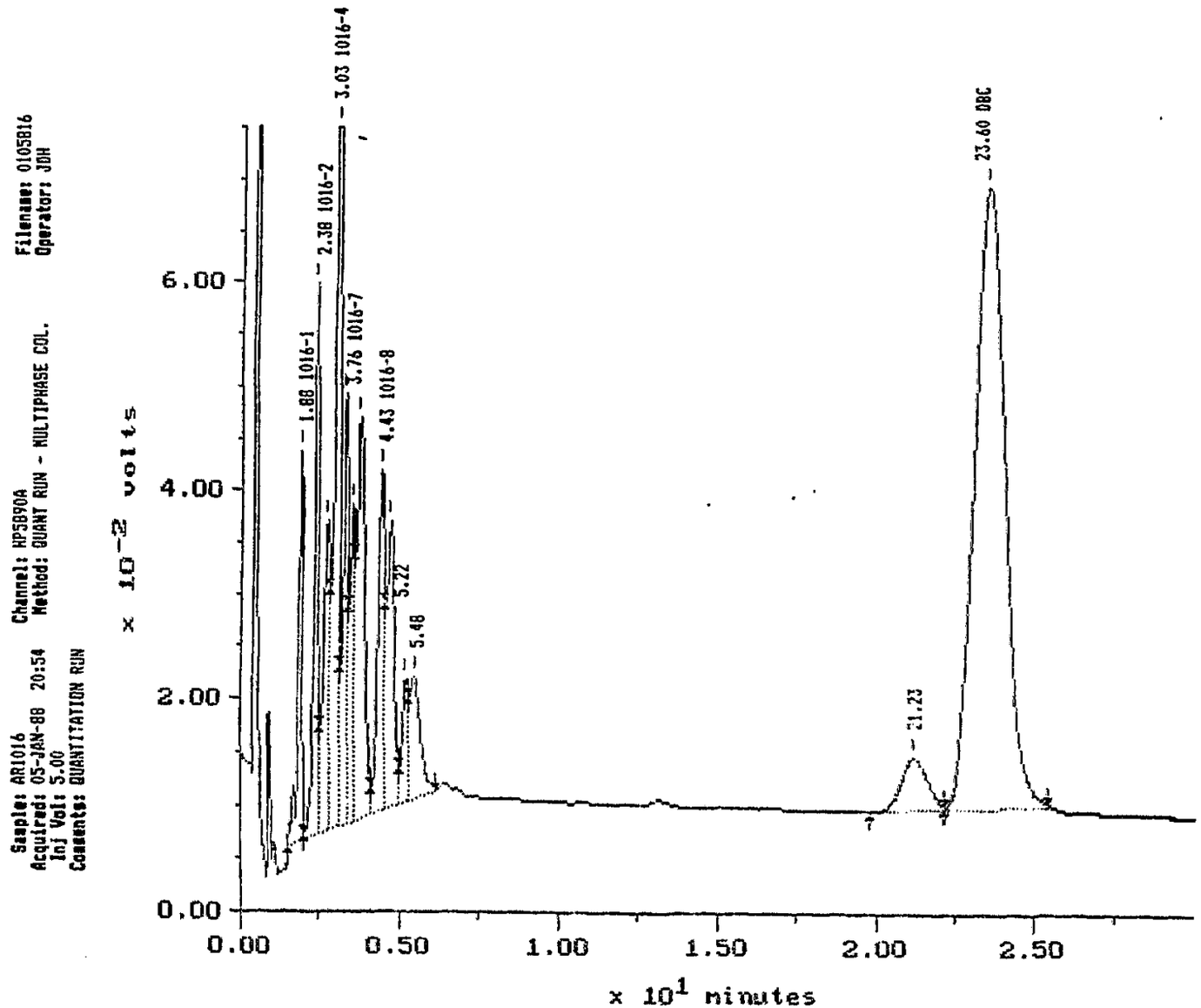
Type: STND
Instrument: HP 5890 A
Filename: 01058TX
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1		3.975	11080	1264				
2		4.708	93901	5599				
3		5.450	169401	6124				
4		6.150	215752	8690				
5		6.442	206379	9499				
6		7.017	374959	8242				
7	1	8.100	799894	21624	EXT	53.80	269.000	TOX-1
8	2	9.025	1587089	18916	EXT	64.37	321.850	TOX-2
9		10.658	738794	15867				
10	3	11.325	712799	19662	EXT	50.06	250.300	TOX-3
11	4	12.100	1322757	29250	EXT	82.87	414.350	TOX-4
12	5	13.242	642920	14467	EXT	43.61	218.050	TOX-5
13	6	14.550	2555268	27739	EXT	139.88	699.400	TOX-6
14		16.400	732551	13197				
15		18.067	573781	10750				
16		19.708	1655802	16194				
17	7	20.783	1201813	14596	EXT	65.41	327.050	TOX-7
18	8	23.608	4613015	60956	EXT	100.00	500.000	DBC
19		27.208	220969	2464				
TOTAL			18428925	305120		600.00	3000.000	

006219

006220



006220

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 16:18:59

SAMPLE: AR1016

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 20:54
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105816
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

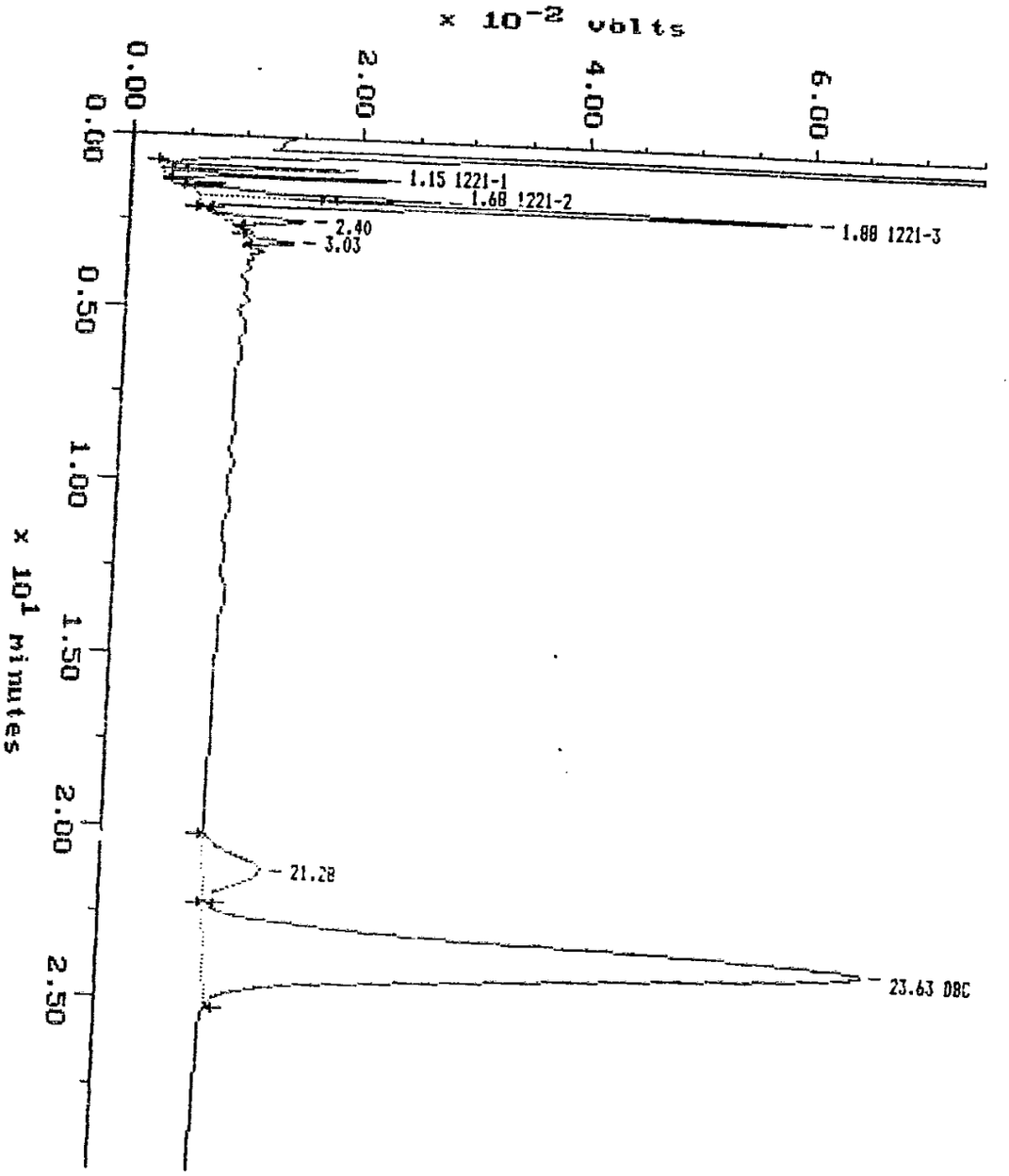
Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1	1	1.883	331411	37102	EXT	20.26	101.295	1016-1
2	2	2.375	516436	52650	EXT	33.24	166.190	1016-2
3	3	2.733	406639	29394	EXT	26.61	133.050	1016-3
4	4	3.025	1024600	95446	EXT	69.36	346.775	1016-4
5	5	3.308	452567	41042	EXT	29.61	148.070	1016-5
6	6	3.533	293406	30196	EXT	21.31	106.570	1016-6
7	7	3.758	649581	38311	EXT	40.18	200.885	1016-7
8	8	4.425	503100	32488	EXT	31.50	157.520	1016-8
9	9	4.717	418062	27202	EXT	27.93	139.645	1016-9
10		5.217	179601	11640				
11		5.403	243788	11559				
12		21.233	276152	4892				
13	10	23.600	4001878	59578	EXT	100.00	500.000	DBC
TOTAL			9297221	471500		400.00	2000.000	

006221

Sample: AR1221
Acquired: 05-JAN-88 21:36
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105821
Operator: JDH



006222

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:20:40

SAMPLE: AR1221

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 21:36
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105821
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1		0.917	89651	15538				
2	1	1.150	115724	18943	EXT	34.35	171.750	1221-1
3	2	1.683	184396	21163	EXT	81.28	406.400	1221-2
4	3	1.883	436199	53875	EXT	184.37	921.850	1221-3
5		2.400	78770	7021				
6		3.033	33627	4058				
7		21.275	269865	4791				
8	4	23.633	3979788	58076	EXT	100.00	500.000	DBC
TOTAL			5088020	183465		400.00	2000.000	

006223

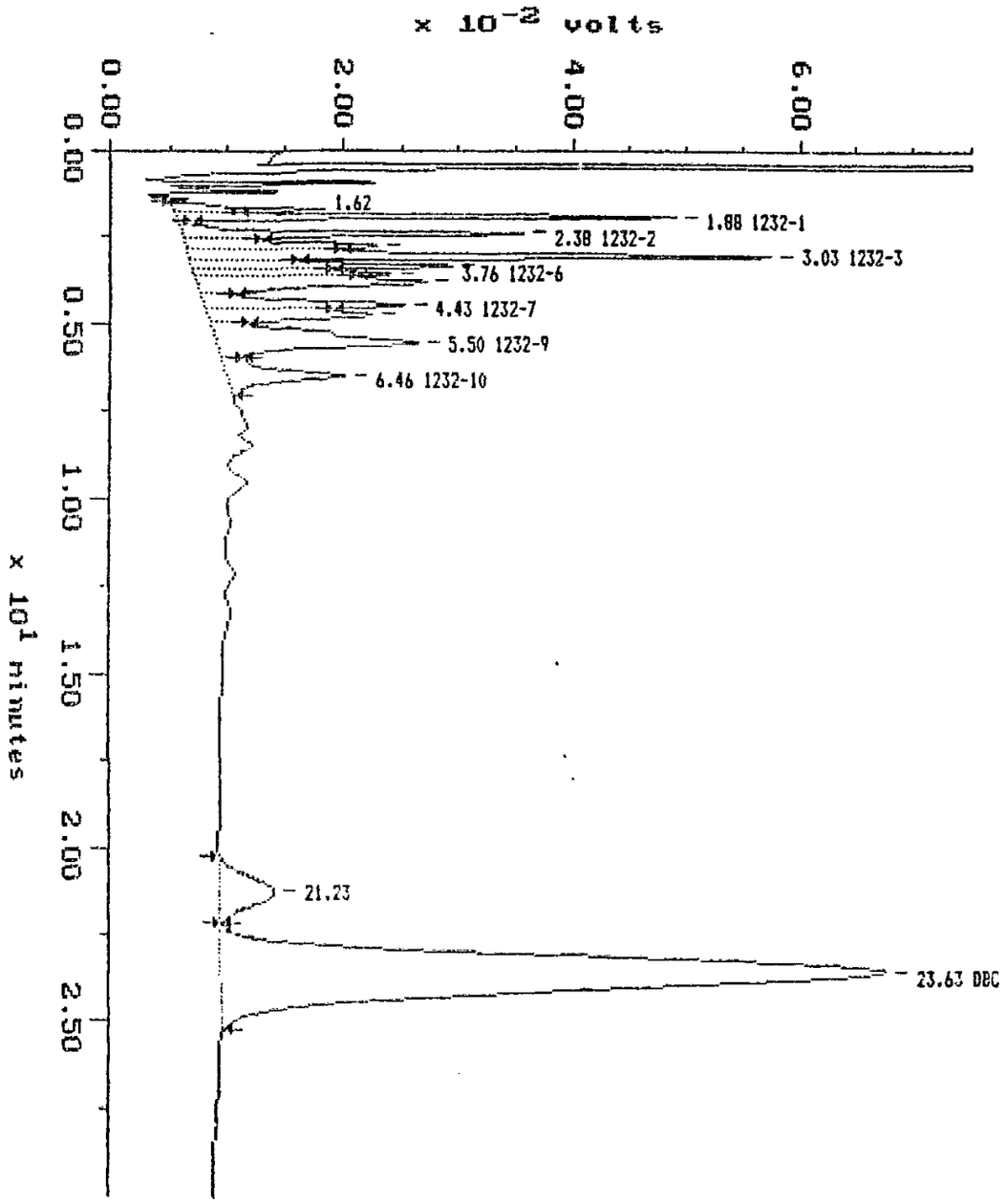
006223

006224

Sample: AR1232
Acquired: 05-JAN-88 22:17
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105632
Operator: JDH



006224

200

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:25:49

SAMPLE: AR1232

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 22:17
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105832
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1		1.617	109073	9404				
2	1	1.883	363142	43665	EXT	38.83	194.150	1232-1
3	2	2.375	329069	29766	EXT	28.93	144.650	1232-2
4		2.742	230746	16667				
5	3	3.025	568967	50888	EXT	57.45	287.250	1232-3
6	4	3.308	252232	22596	EXT	23.66	118.300	1232-4
7	5	3.533	173614	16986	EXT	17.90	89.500	1232-5
8	6	3.758	354586	19864	EXT	28.40	142.000	1232-6
9	7	4.425	300281	17344	EXT	23.33	116.650	1232-7
10	8	4.717	229764	14339	EXT	19.86	99.300	1232-8
11	9	5.500	520673	17527	EXT	41.92	209.600	1232-9
12	10	6.458	255346	10243	EXT	19.74	98.700	1232-10
13		21.225	277697	4902				
14	11	23.625	3892675	58231	EXT	100.00	500.000	DBC
TOTAL			7857866	332423		400.02	2000.100	

006225

201

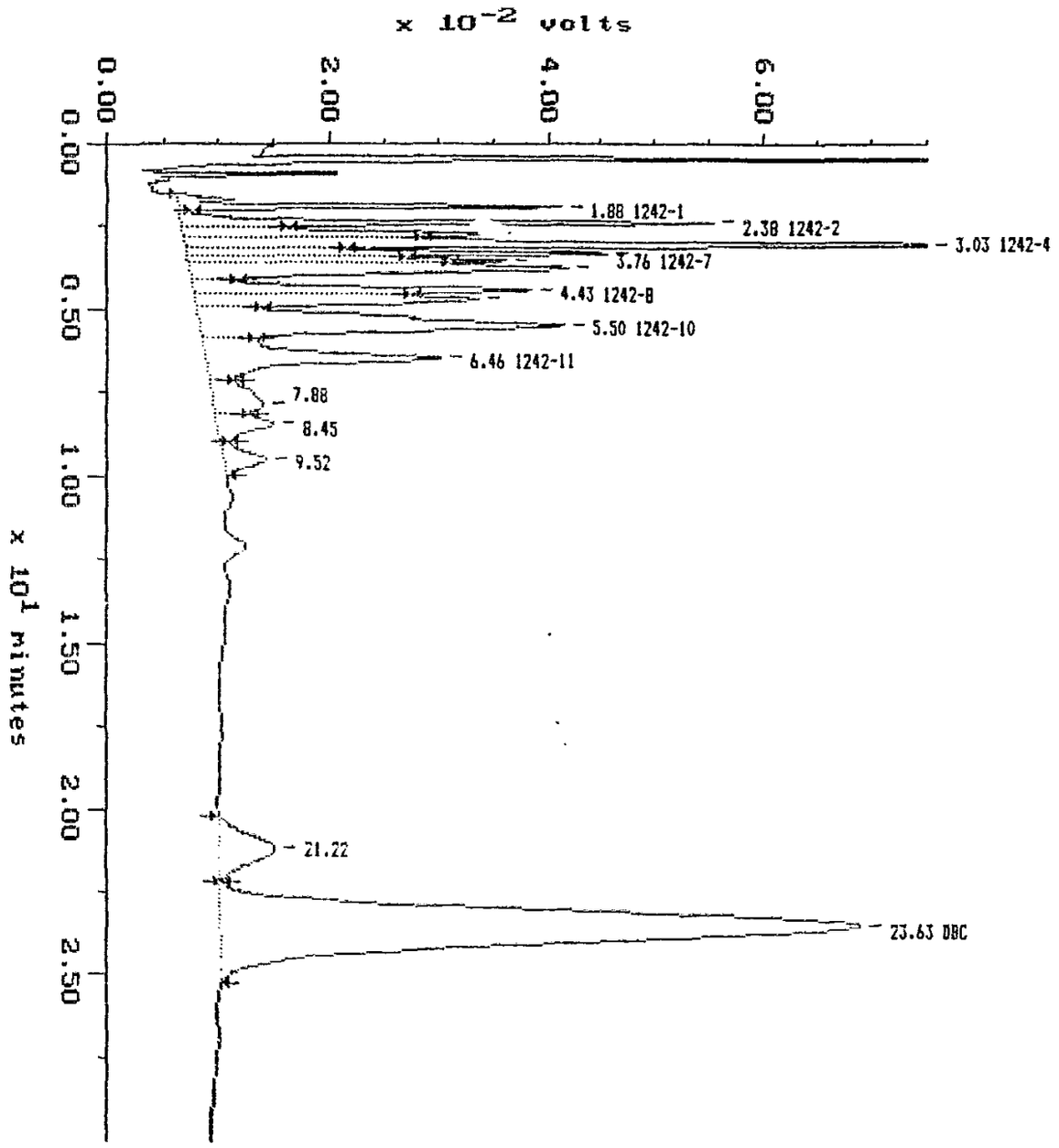
006225

006226

Sample: AR1242
Acquired: 05-JAN-88 22:59
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105842
Operator: JDH



006226

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:30:50

SAMPLE: AR1242

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 22:59
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105842
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

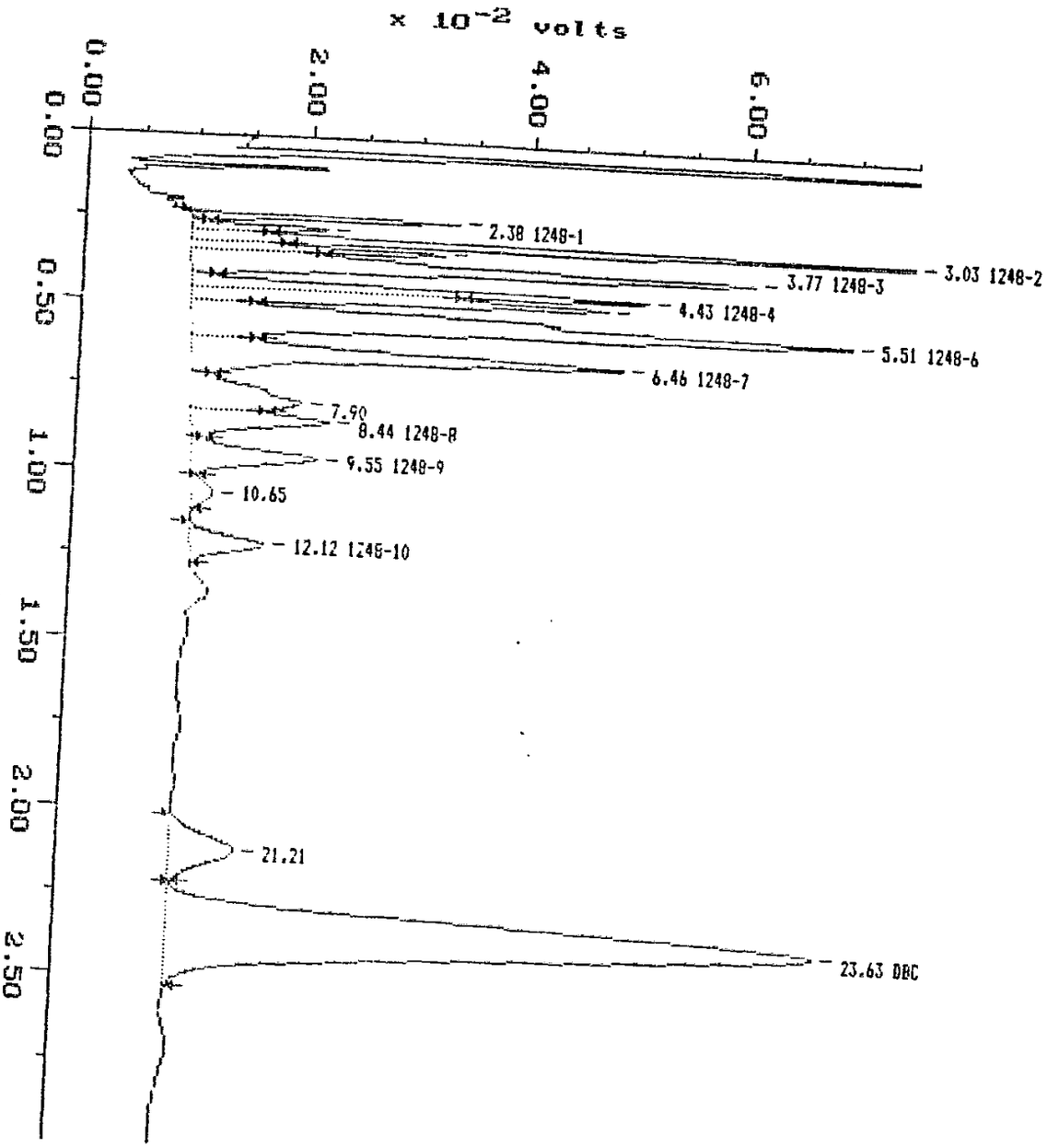
Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1	1	1.883	310145	34827	EXT	14.78	73.890	1242-1
2	2	2.375	486922	48935	EXT	24.68	123.400	1242-2
3	3	2.733	379323	27718	EXT	19.83	99.155	1242-3
4	4	3.025	954494	87896	EXT	52.74	263.725	1242-4
5	5	3.308	419443	38471	EXT	22.47	112.325	1242-5
6	6	3.533	291197	28790	EXT	16.29	81.470	1242-6
7	7	3.758	595704	34551	EXT	29.72	148.620	1242-7
8	8	4.425	500199	30629	EXT	23.60	118.020	1242-8
9	9	4.717	415364	25634	EXT	22.14	110.715	1242-9
10	10	5.500	985637	33023	EXT	47.94	239.720	1242-10
11	11	6.455	612972	21315	EXT	25.79	128.960	1242-11
12		7.883	217988	4569				
13		8.450	154227	5160				
14		9.517	122443	3794				
15		21.217	288702	5078				
16	12	23.625	3937811	58908	EXT	100.00	500.000	DBC
TOTAL			10672571	489299		400.00	2000.000	

006227

Sample: AR1248
Acquired: 05-JAN-88 23:41
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105848
Operator: JDH



006228

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:38:18

SAMPLE: AR1248

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 5-JAN-1988 23:41
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 010584B
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1	1	2.375	188519	24105	EXT	8.17	40.850	1248-1
2		2.708	154313	12336				
3	2	3.033	731379	73840	EXT	34.16	170.800	1248-2
4		3.317	240891	22769				
5	3	3.767	1012184	51222	EXT	49.12	245.600	1248-3
6	4	4.425	598236	41501	EXT	29.66	148.300	1248-4
7	5	4.725	582709	37791	EXT	27.59	137.950	1248-5
8	6	5.508	1718857	59956	EXT	63.15	315.750	1248-6
9	7	6.459	998129	39122	EXT	47.77	238.850	1248-7
10		7.900	405151	9772				
11	8	8.442	331877	12321	EXT	14.80	74.000	1246-8
12	9	9.550	355904	11182	EXT	15.07	75.350	1248-9
13		10.650	70487	1543				
14	10	12.117	207853	6578	EXT	10.51	52.550	1248-10
15		21.208	328619	5616				
16	11	23.633	3928791	58726	EXT	100.00	500.000	DBC
TOTAL			11853899	460780		400.00	2000.000	

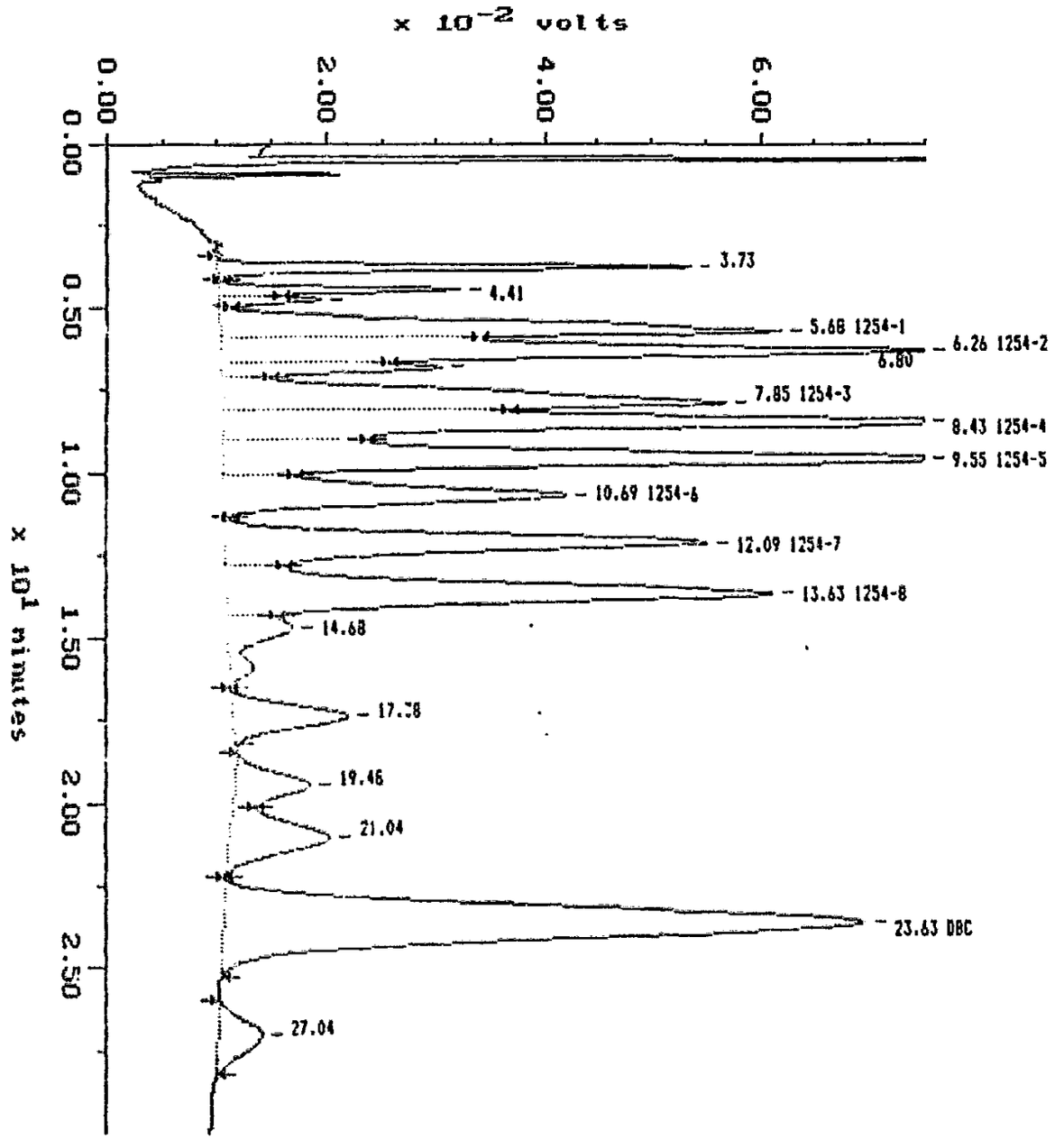
006229

006230

Sample: AR1254
Acquired: 06-JAN-88 0:23
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105854
Operator: JDH



006230

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:41:57

SAMPLE: AR1254

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 0:23
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105854
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1		3.725	543216	43614				
2		4.408	292684	22020				
3		4.725	121995	9287				
4	1	5.683	1524939	51644	EXT	64.43	322.150	1254-1
5	2	6.258	1771168	65558	EXT	74.20	371.000	1254-2
6		6.800	369288	20289				
7	3	7.850	1631574	46332	EXT	69.37	346.850	1254-3
8	4	8.433	2083189	75128	EXT	88.30	441.500	1254-4
9	5	9.550	2264934	70642	EXT	91.83	459.150	1254-5
10	6	10.692	1163970	31527	EXT	51.14	255.700	1254-6
11	7	12.092	1651282	44513	EXT	71.12	355.600	1254-7
12	8	13.633	2151555	50289	EXT	89.62	448.100	1254-8
13		14.683	353291	6049				
14		17.375	495447	10698				
15		19.475	370944	7003				
16		21.042	593683	9248				
17	9	23.625	3917907	58983	EXT	100.00	500.000	DBC
18		27.042	260686	3916				
TOTAL			21561734	626742		700.01	3500.050	

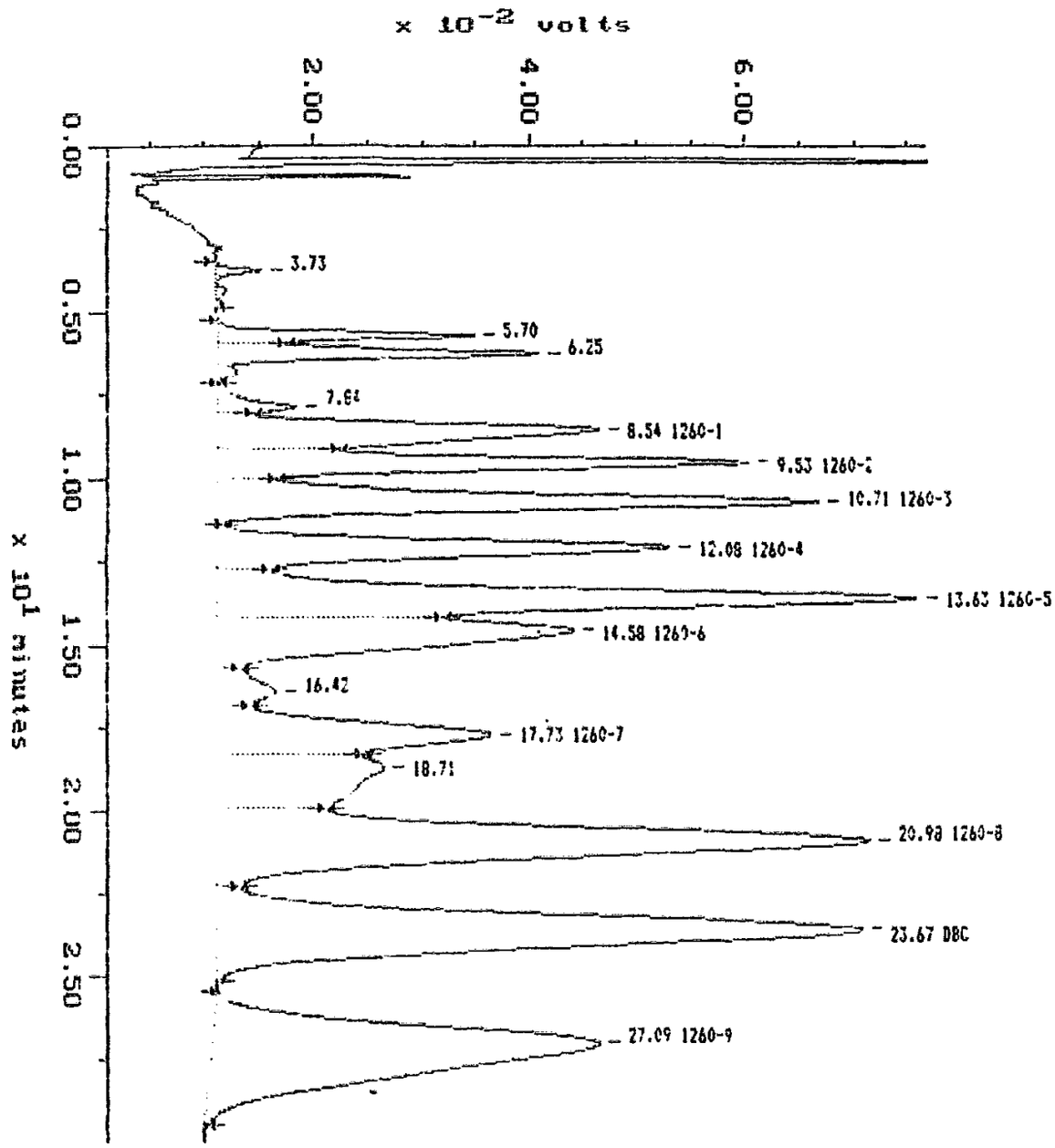
006231

006232

Sample: AR1260
Acquired: 06-JAN-88 1:05
Inj Vol: 5.00
Comments: QUANTITATION RUN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105860
Operator: JDH



006232

208

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 10:46:03

SAMPLE: AR1260

#1 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 1:05
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105860
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk #	Comp #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/mL)	Amt. on Col. (pg)	Component Name
1		3.725	76859	4182				
2		5.700	397148	23583				
3		6.250	616894	29683				
4		7.842	169124	7053				
5	1	8.542	1351697	35112	EXT	40.37	201.850	1260-1
6	2	9.533	1383073	49086	EXT	41.65	208.250	1260-2
7	3	10.709	1939444	55480	EXT	58.70	293.500	1260-3
8	4	12.082	1517465	41886	EXT	46.21	231.050	1260-4
9	5	13.633	2799917	64659	EXT	80.45	402.250	1260-5
10	6	14.583	1785522	32886	EXT	55.33	276.650	1260-6
11		15.417	260582	5203				
12	7	17.725	1382342	25265	EXT	42.88	214.400	1260-7
13		18.708	1269143	15261				
14	8	20.875	3902812	60251	EXT	125.09	625.450	1260-8
15	9	23.667	4039734	59697	EXT	100.00	500.000	DBC
16	10	27.092	3524254	35847	EXT	109.28	546.390	1260-9
TOTAL			26416958	545135		699.96	3499.790	

006233

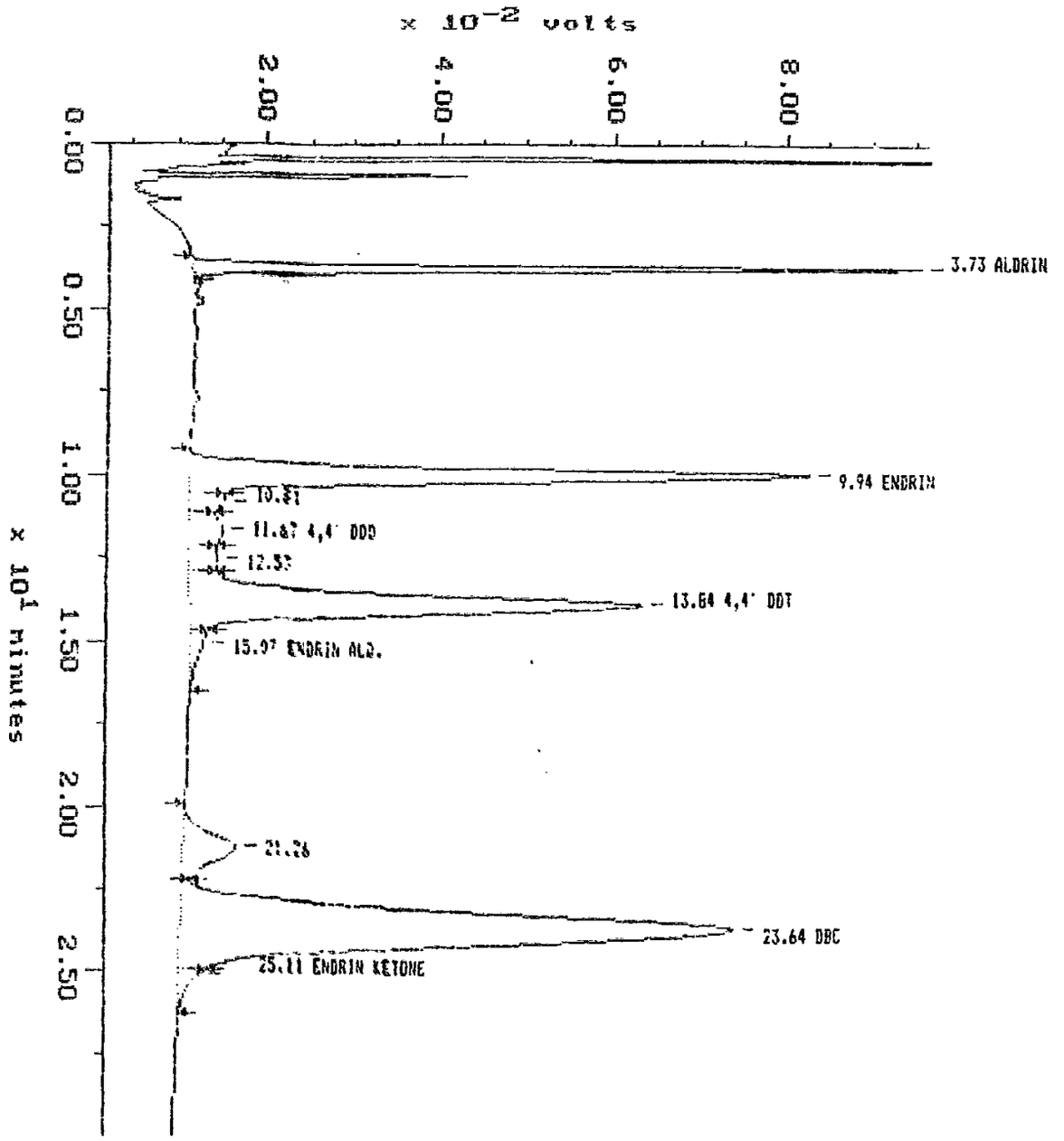
209

006234

Sample: EVALB
Acquired: 06-JAN-88 5:15
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105EB2
Operator: JDH



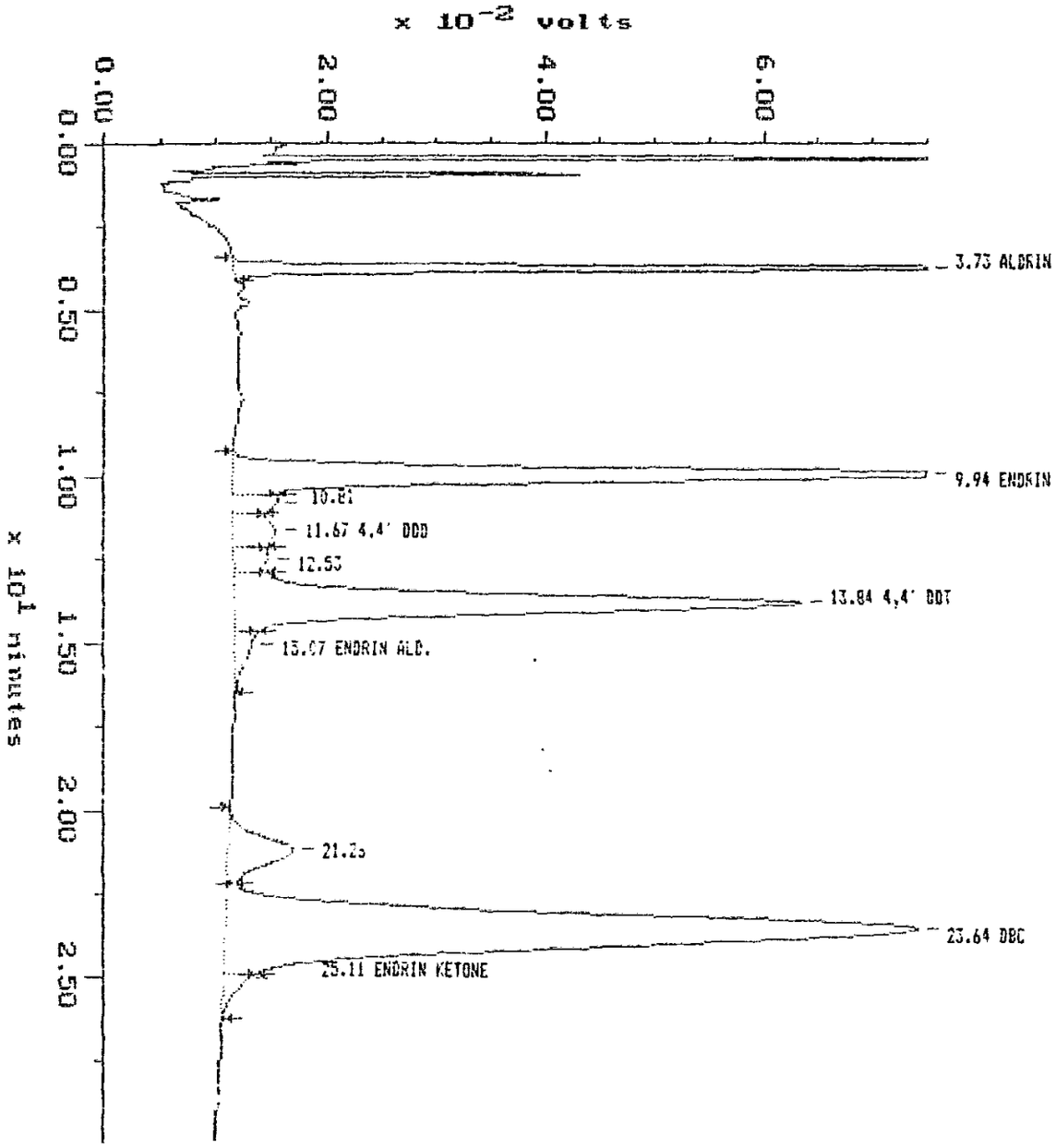
006234

210

Sample: EVALB
Acquired: 06-JAN-88 5:15
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105EB2
Operator: JDH



006235

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:46:41

SAMPLE: EVAL3

#19 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 5:15
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105EB2
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	6	3.725	947835	83861	EXT	15.000	75.000	ALDRIN
2	13	9.942	1990864	71478	EXT	50.000	250.000	ENDRIN
3		10.808	134469	3943				
4	14	11.667	202768	3798	EXT	0.000	0.000	4,4' DDD
5		12.525	143173	3005				
6	16	13.842	2090479	51843	EXT	50.000	250.000	4,4' DDT
7	17	15.667	99597	1620	EXT	0.000	0.000	ENDRIN ALD.
8		21.258	346326	5905				
9	19	23.642	4306617	63380	EXT	100.000	500.000	DBC
10	20	25.108	78692	2127	EXT	0.000	0.000	ENDRIN KETONE
TOTAL			10340820	290801		215.000	1075.000	

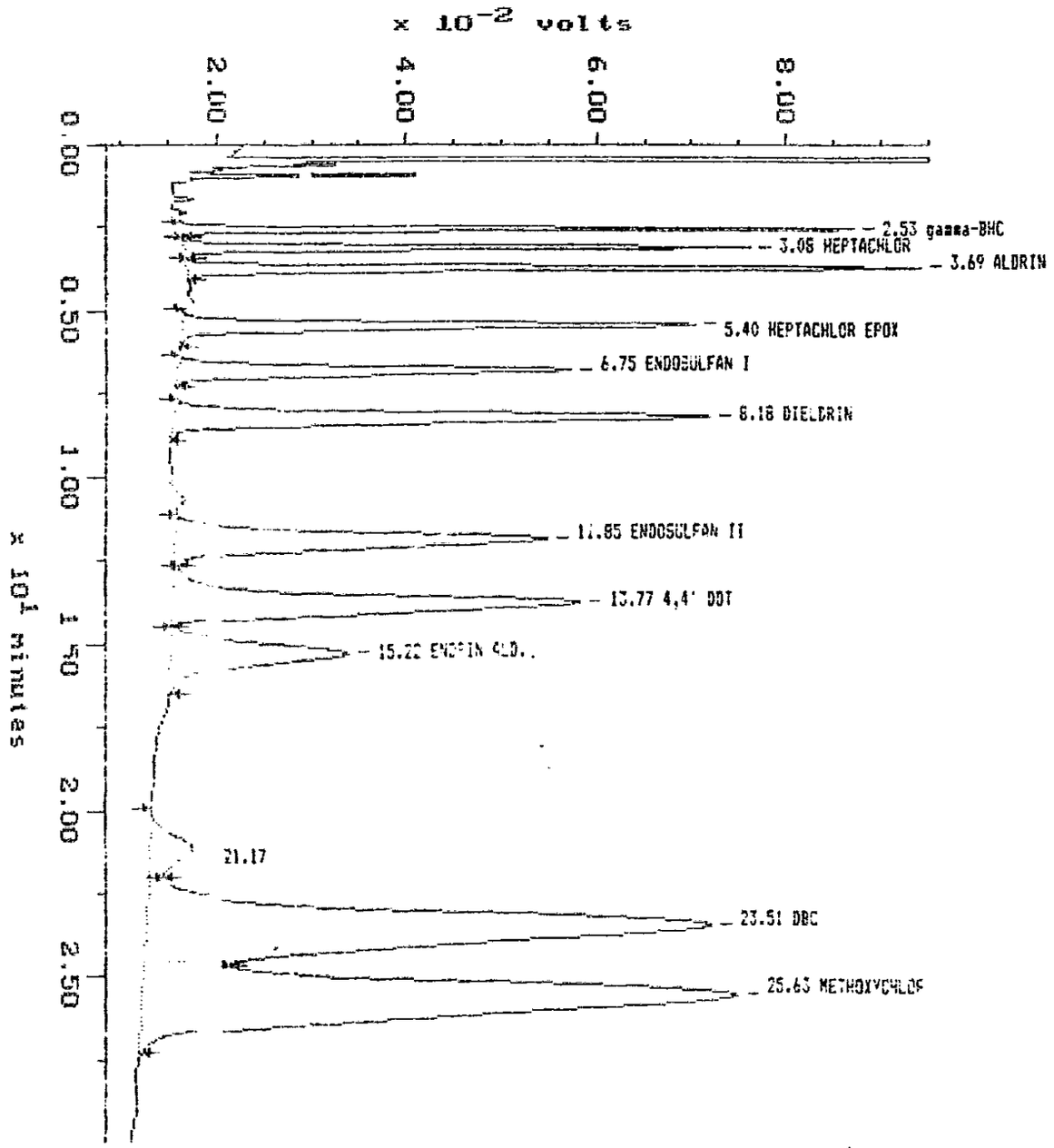
006236

006237

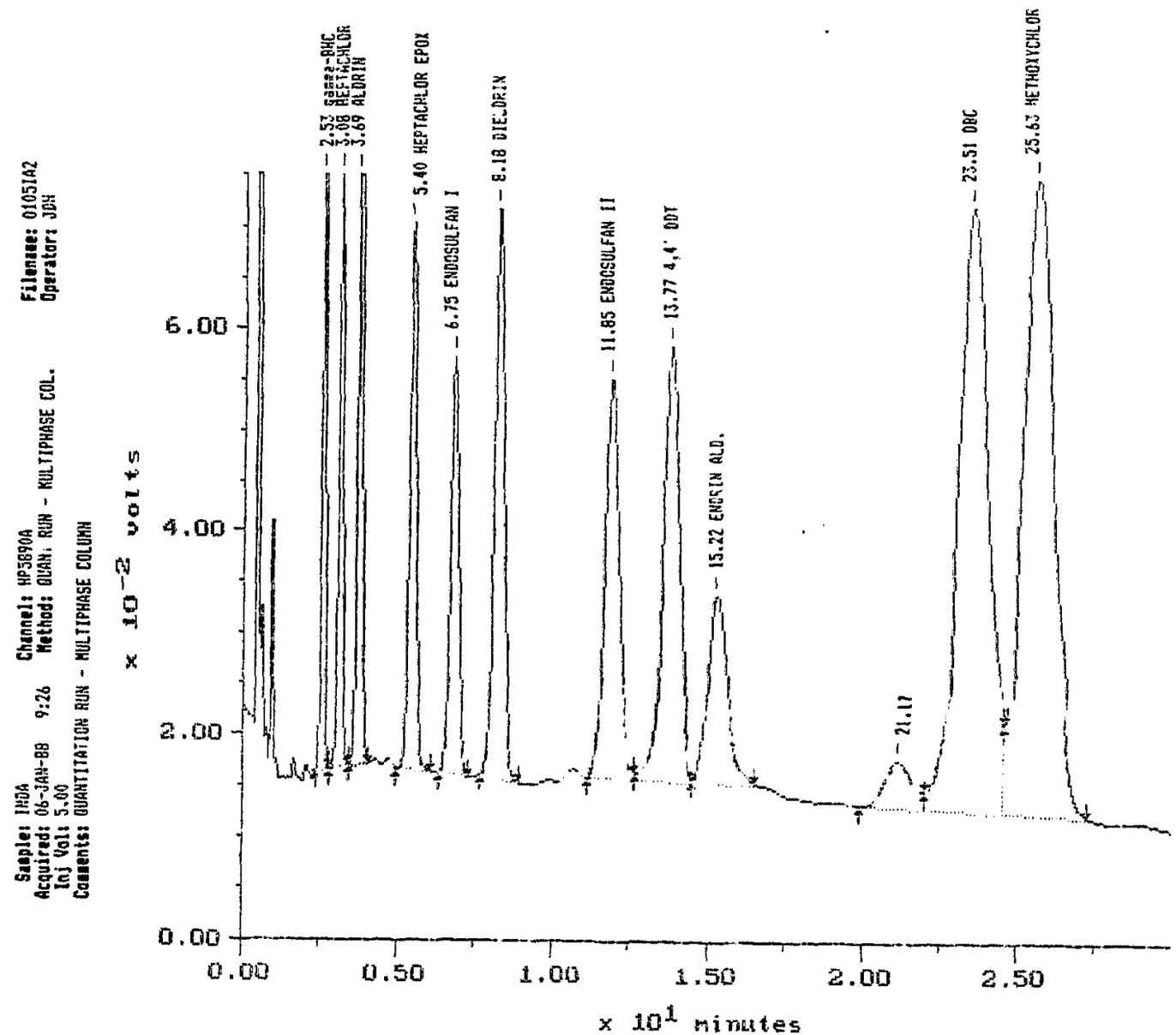
Sample: INDA
Acquired: 06-JAN-88 9:26
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105IA2
Operator: JDH



006237


Sample: INDA
Acquired: 06-JAN-88 9:26
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN
Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Filename: 0105IA2
Operator: JDH
x 10^-2 volts
6.00
4.00
2.00
0.00
0.00
0.50
1.00
1.50
2.00
2.50
x 10^1 minutes
2.53 gamma-BHC
3.08 HEPTACHLOR
3.69 ALDRIN
5.40 HEPTACHLOR EPOX
6.75 ENDOSULFAN I
8.18 DIELDRIN
11.85 ENDOSULFAN II
13.77 4,4' DDT
15.22 ENDRIN ALD.
21.17
23.51 DBC
25.63 METHOXYCHLOR

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 6-JAN-1988 15:50:29

SAMPLE: INDA

#25 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 9:26
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105IA2
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	2	2.525	543433	70552	EXT	10.000	50.000	gamma-BHC
2	4	3.075	562697	59509	EXT	10.000	50.000	HEPTACHLOR
3	6	3.692	840467	77225	EXT	15.000	75.000	ALDRIN
4	7	5.400	822067	54006	EXT	15.000	75.000	HEPTACHLOR EPOX
5	10	6.750	765148	41254	EXT	15.000	75.000	ENDOSULFAN I
6	12	8.183	1239005	56190	EXT	25.000	125.000	DIELDRIN
7	15	11.850	1277330	39350	EXT	25.000	125.000	ENDOSULFAN II
8	16	13.767	1575090	42956	EXT	50.000	250.000	4,4' DDT
9	17	15.217	912821	18506	EXT	25.000	125.000	ENDRIN ALD.
10		21.167	285396	4596				
11	19	23.508	4044548	59552	EXT	100.000	500.000	DBC
12	21	25.625	4379896	62686	EXT	200.000	1000.000	METHOXYCHLOR
TOTAL			17147897	586386		490.000	2450.000	

006239

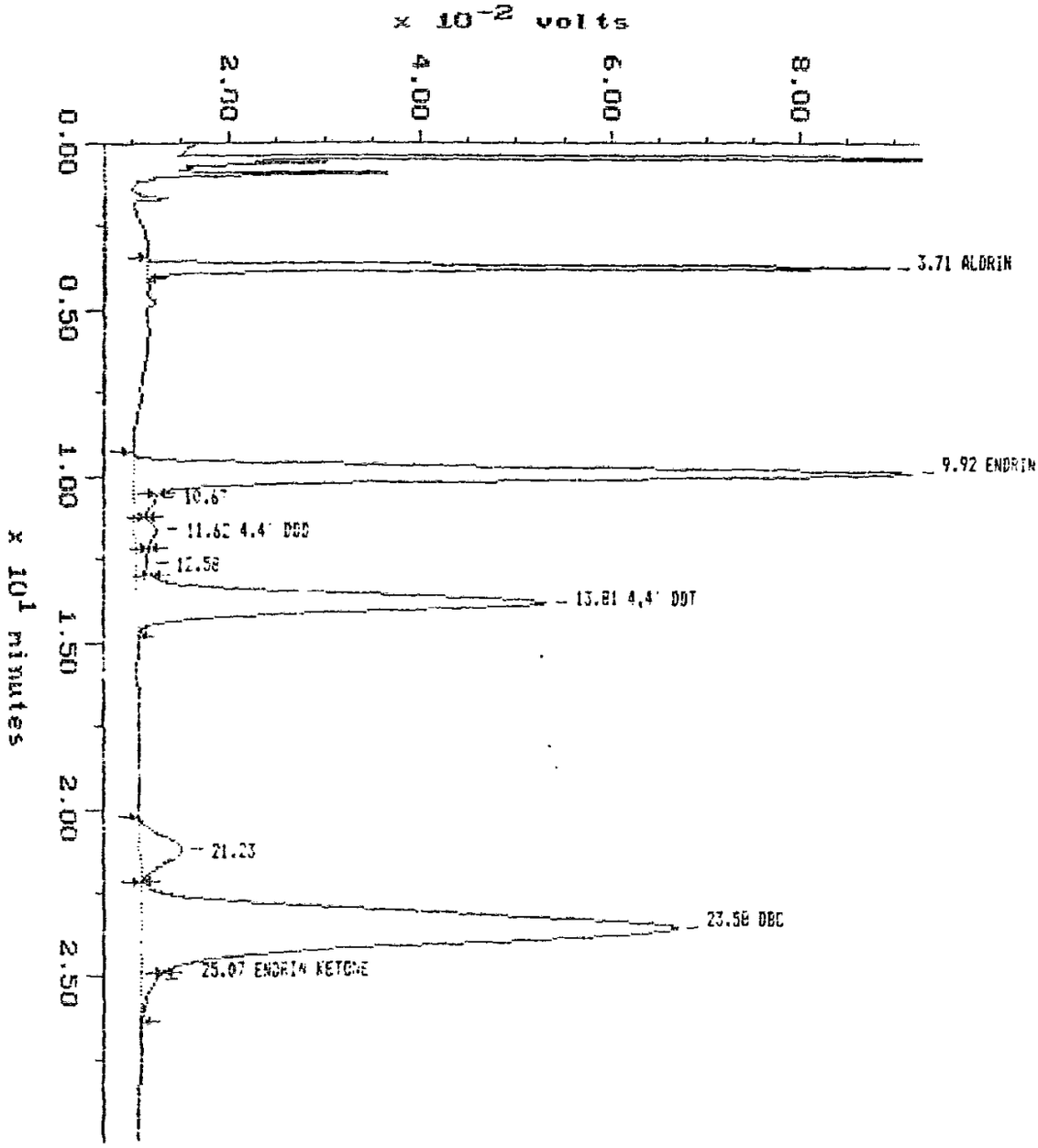
215

006239

Sample: EVALB
Acquired: 06-JAN-88 13:38
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105EB3
Operator: JDH

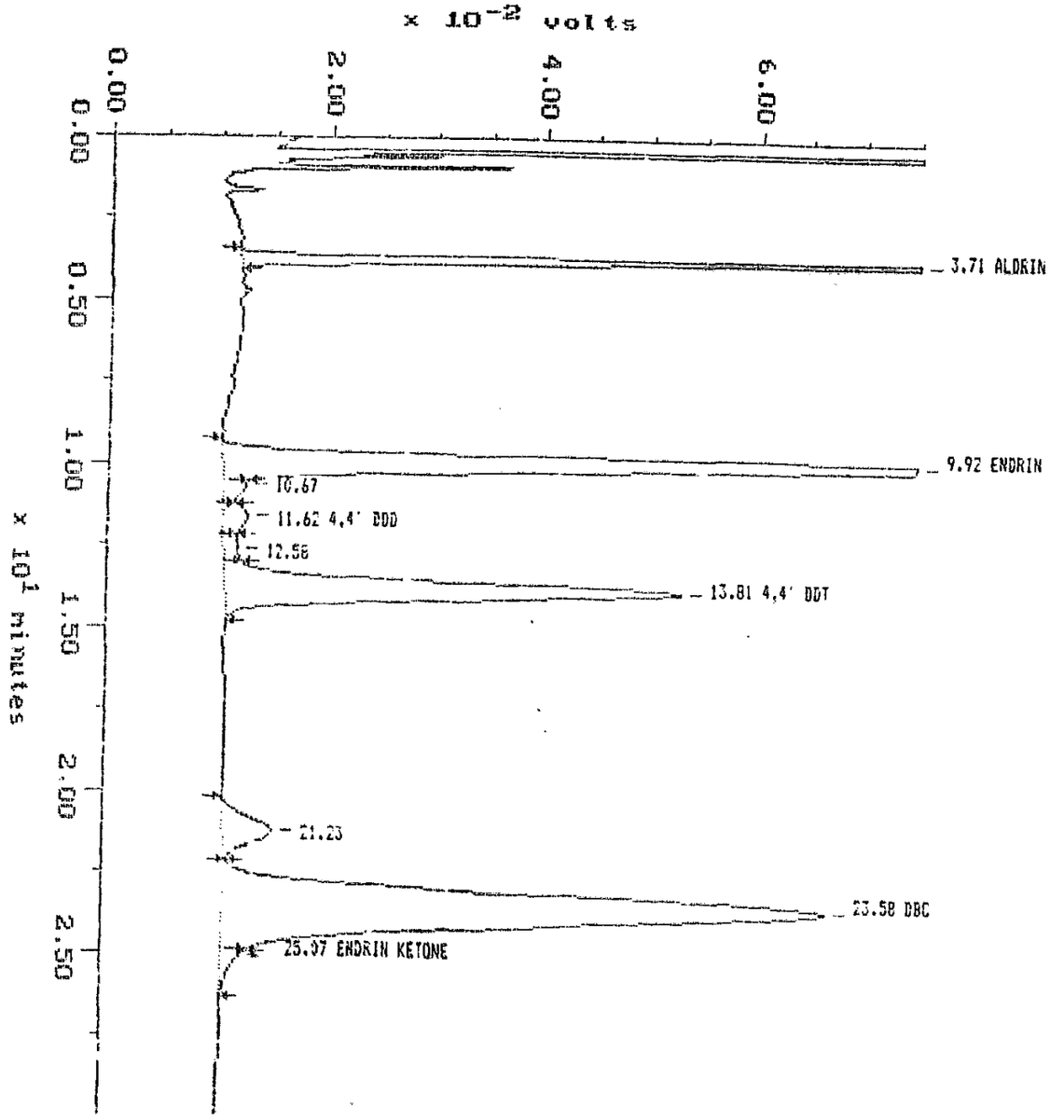


006240

Sample: EVALB
Acquired: 06-JAN-86 13:38
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105EB3
Operator: JDH



006241

217

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 14:28:29

SAMPLE: EVAL3

#31 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 13:38
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105EB3
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	6	3.708	850699	77795	EXT	15.000	75.000	ALDRIN
2	13	9.917	2176408	81752	EXT	50.000	250.000	ENDRIN
3		10.667	69466	2170				
4	14	11.617	99037	2169	EXT	0.000	0.000	4,4' DDD
5		12.583	60263	1131				
6	16	13.808	1596380	42565	EXT	50.000	250.000	4,4' DDT
7		21.233	250603	4489				
8	19	23.583	3712332	56210	EXT	100.000	500.000	DEC
9	20	25.067	63298	1651	EXT	0.000	0.000	ENDRIN KETONE
TOTAL			8878676	269934		215.000	1075.000	

006242

218

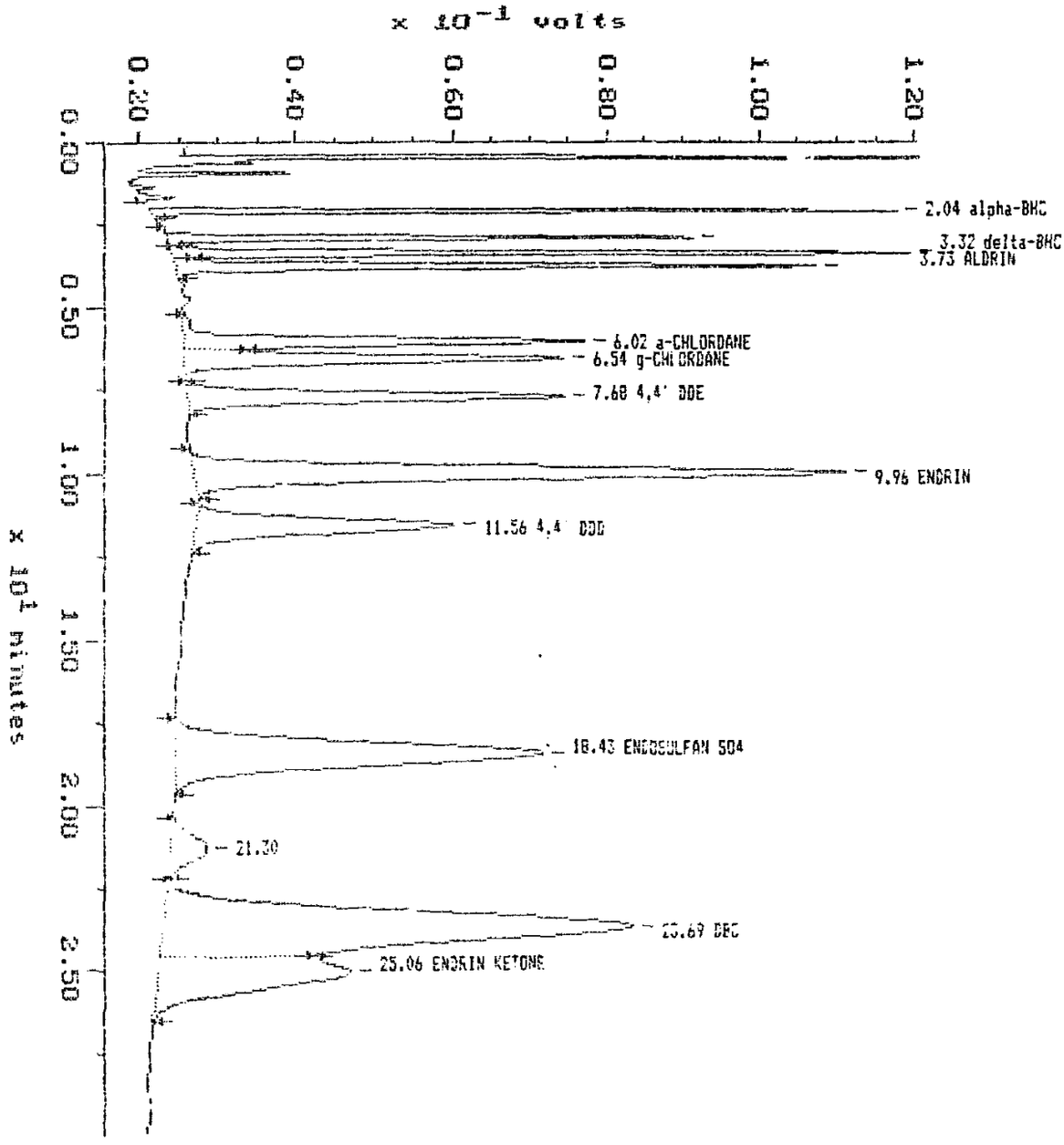
006242

006243

Sample: INDB
Acquired: 06-JAN-88 17:36
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105IB2
Operator: JDH



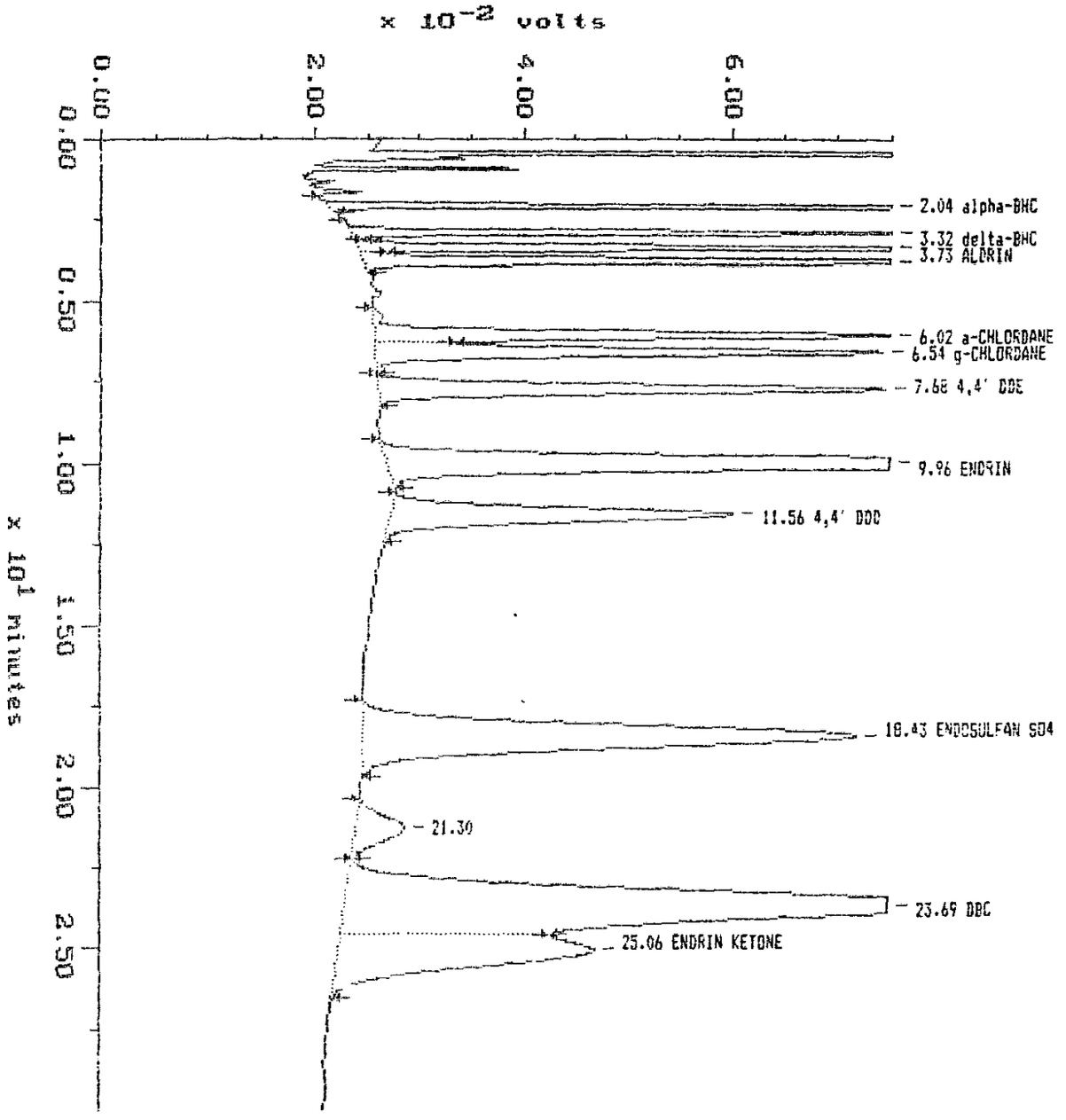
006243

006244

Sample: INDB
Acquired: 06-JAN-88 17:36
Inj [illegible] 5.00
Comme[illegible]: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105IB2
Operator: JDH



006244

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 8-JAN-1988 9:59:19

SAMPLE: INDB

#37 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 17:36
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105IB2
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	1	2.042	626266	96311	EXT	10.000	50.000	alpha-BHC
2	3	2.850	570029	67800	EXT	20.000	100.000	beta-BHC
3	5	3.317	873365	95394	EXT	15.000	75.000	delta-BHC
4	6	3.725	899871	82643	EXT	15.000	75.000	ALDRIN
5	8	6.017	877521	51510	EXT	15.000	75.000	a-CHLORDANE
6	9	6.542	893488	48626	EXT	15.000	75.000	g-CHLORDANE
7	11	7.683	995874	48599	EXT	20.000	100.000	4,4' DDE
8	13	9.958	2237624	84321	EXT	50.000	250.000	ENDRIN
9	14	11.558	1016134	33082	EXT	25.000	125.000	4,4' DDD
10	18	18.433	2327209	47354	EXT	50.000	250.000	ENDOSULFAN SO4
11		21.300	253832	4548				
12	19	23.592	4076187	60649	EXT	100.000	500.000	DBC
13	20	25.058	1475846	24541	EXT	25.000	125.000	ENDRIN KETONE
TOTAL			17123248	745378		360.000	1800.000	

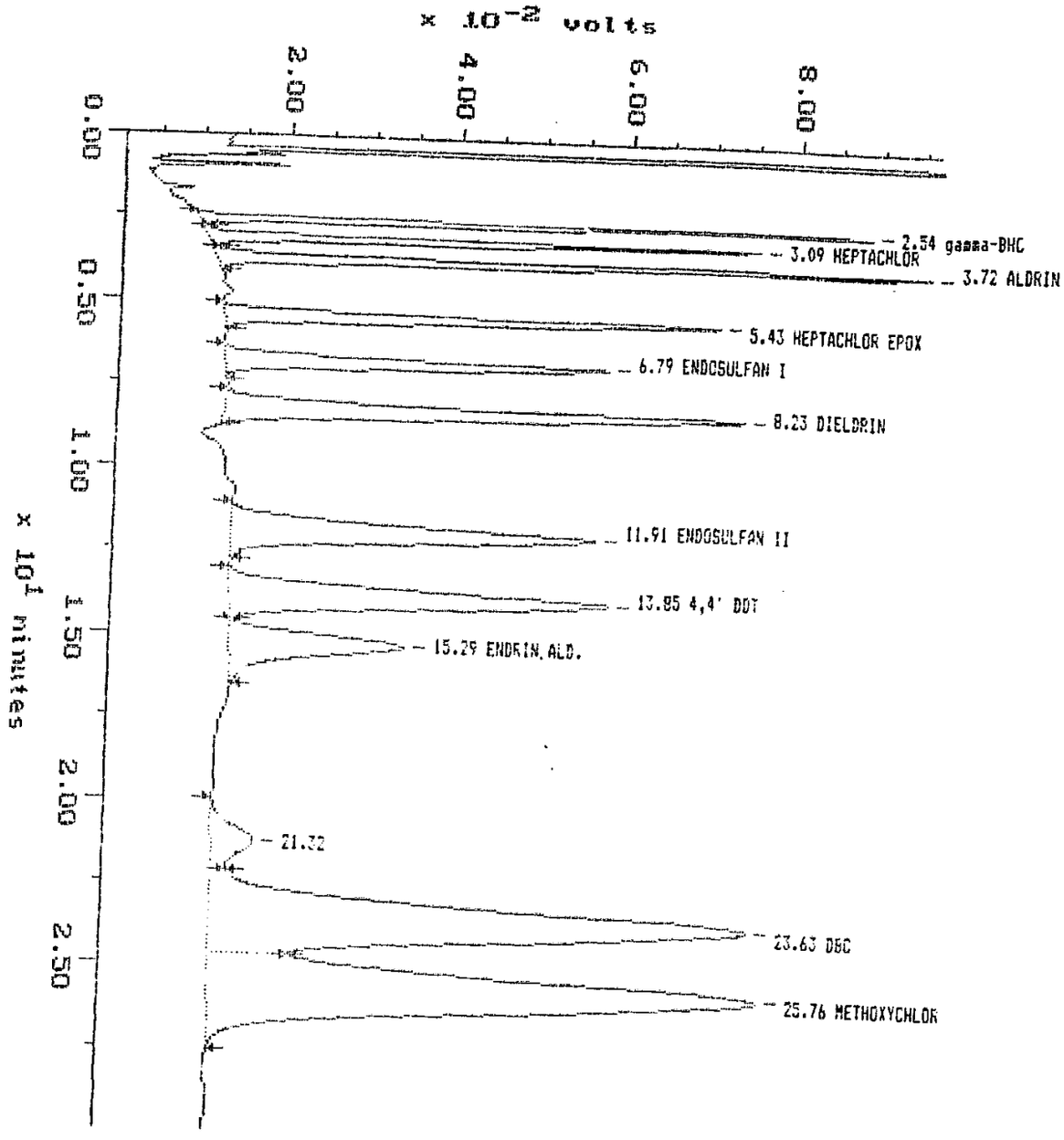
006245

006246

Sample: INDA
Acquired: 06-JAN-88 21:05
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105IA3
Operator: JDH

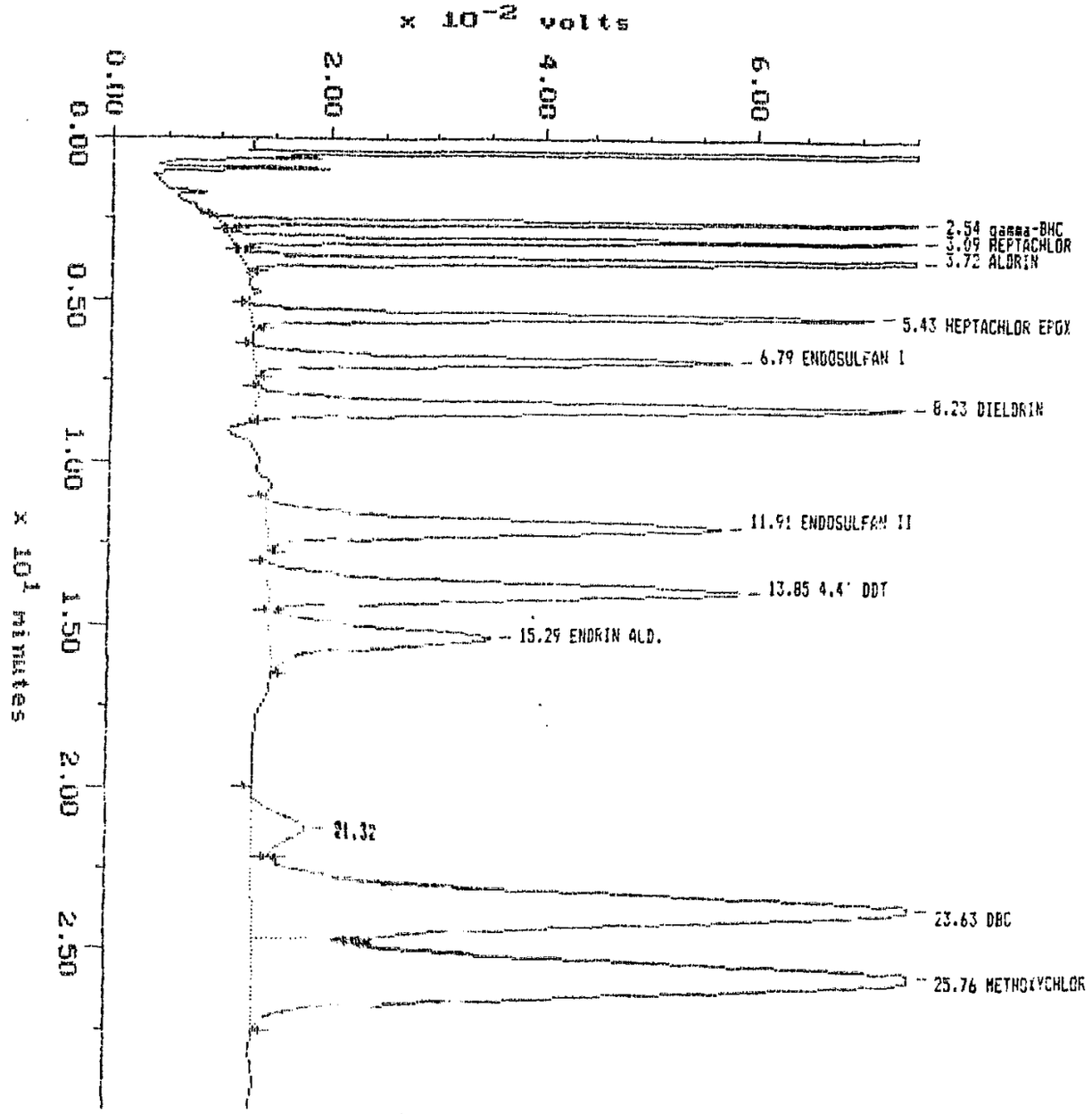


006246

Sample: INDA
Acquired: 06-JAN-88 21:05
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5870A
Method: QUANT RUN - MULTIPHASE COL.

Filename: G10SIA
Operator: JDH



006247

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 8-JAN-1988 11:26:29

SAMPLE: INDA

#42 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 21:05
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105IA3
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	2	2.542	602729	78986	EXT	10.000	50.000	gamma-BHC
2	4	3.092	629320	64659	EXT	10.000	50.000	HEPTACHLOR
3	6	3.717	922435	84003	EXT	15.000	75.000	ALDRIN
4	7	5.433	886835	58246	EXT	15.000	75.000	HEPTACHLOR EPOX
5	10	6.792	842064	44739	EXT	15.000	75.000	ENDOSULFAN I
6	12	8.225	1352993	60762	EXT	25.000	125.000	DIELDRIN
7	15	11.908	1451405	42654	EXT	25.000	125.000	ENDOSULFAN II
8	16	13.850	1598243	44291	EXT	50.000	250.000	4,4' DDT
9	17	15.292	876755	20362	EXT	25.000	125.000	ENDRIN ALD.
10		21.317	304834	4888				
11	19	23.633	4203653	63040	EXT	100.000	500.000	DDC
12	21	25.758	4546466	64148	EXT	200.000	1000.000	METHOXYCHLOR
TOTAL			18321231	630779		490.000	2450.000	

006248

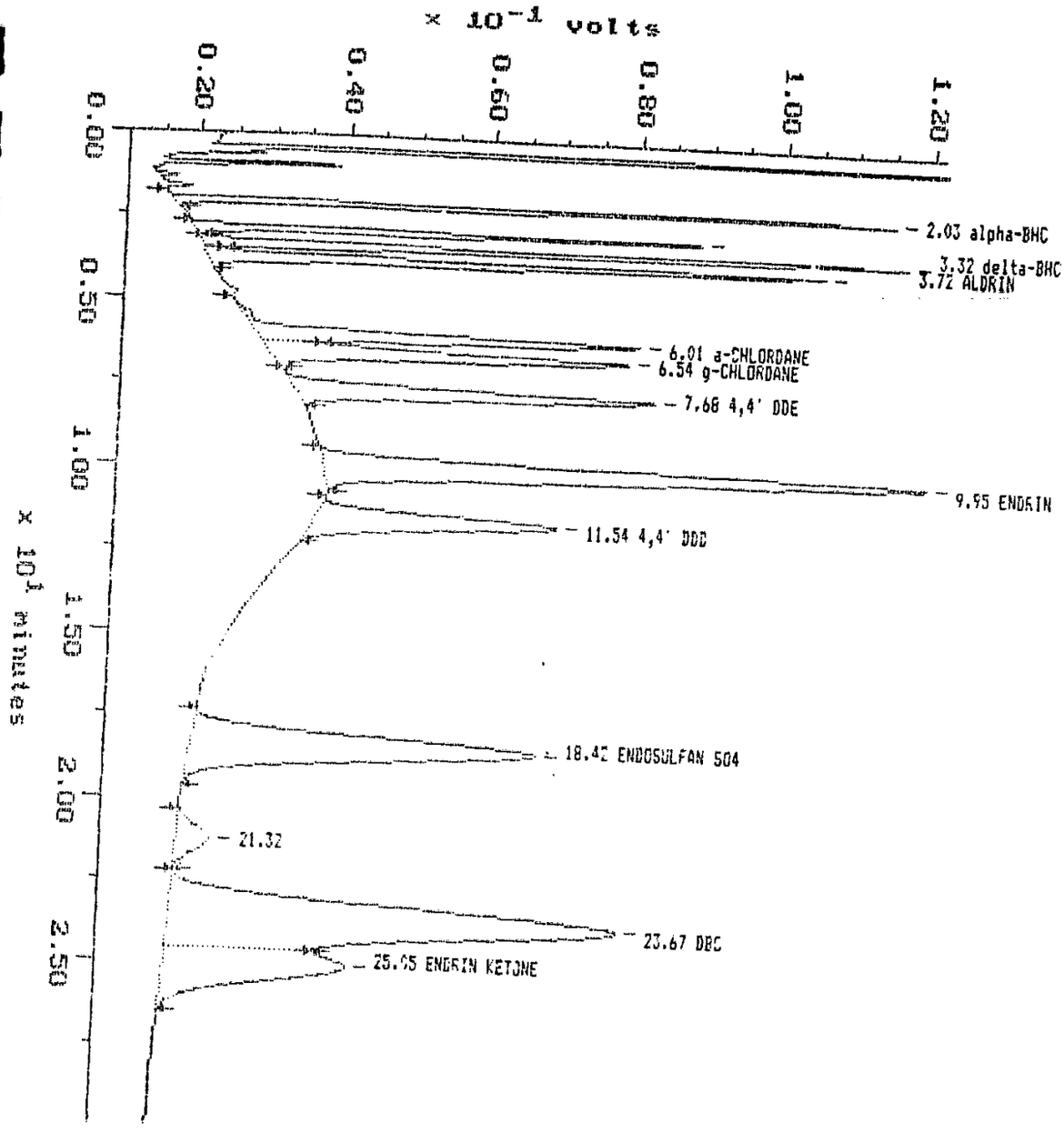
224

006248

Sample: INDB
Acquired: 06-JAN-88 21:47
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105183
Operator: JDH

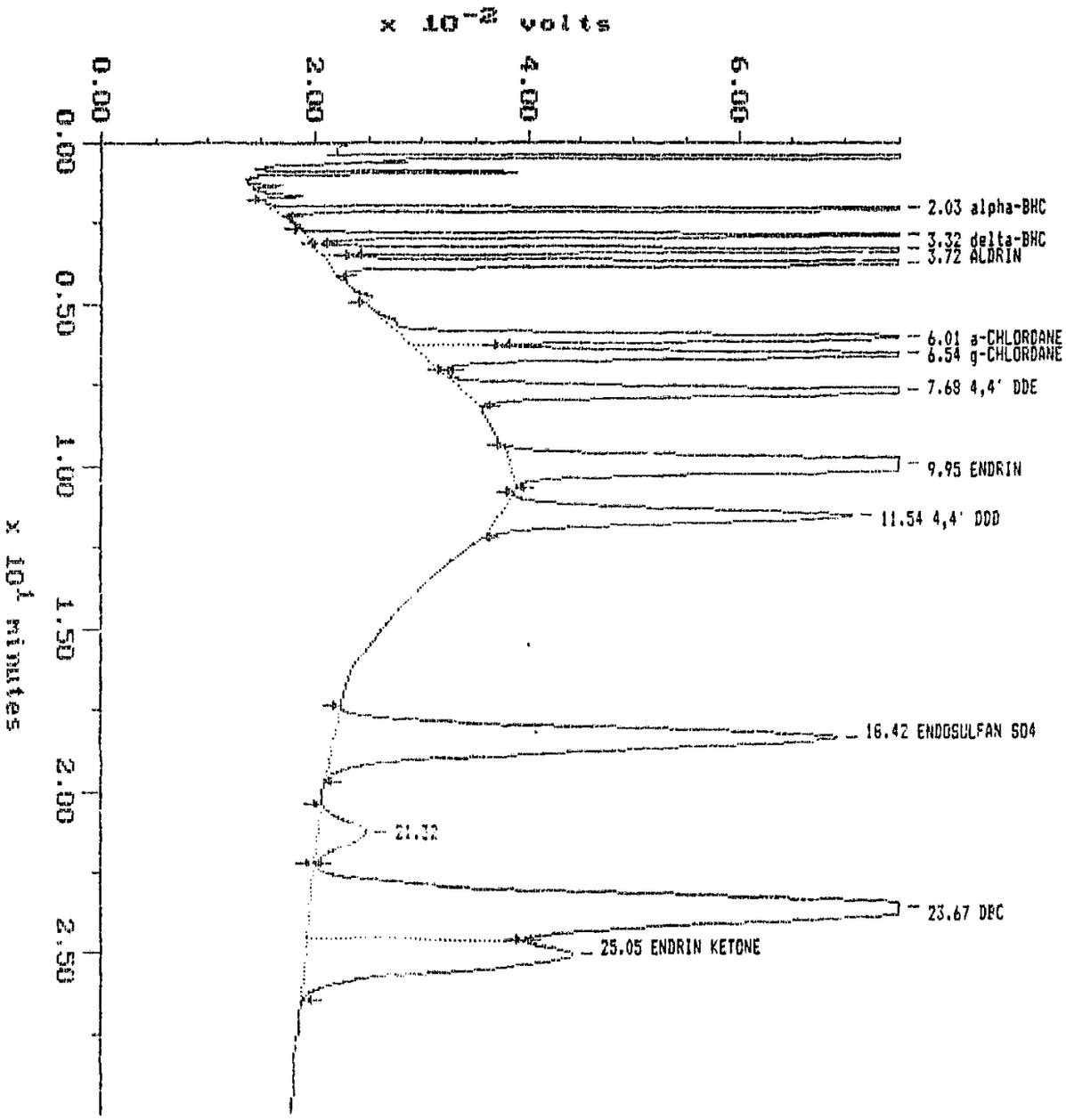


006249

Sample: INDP
Acquired: 06-JAN-88 21:47
Inj Vol: 5.00
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.

Filename: 0105IB3
Operator: JDH



006250

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 8-JAN-1988 10:04:15

SAMPLE: INDB

#43 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 21:47
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: STND
Instrument: HP 5890 A
Filename: 0105183
Index: Disk
Injection Volume: 5.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Amt. on col. (pg)	Component Name
1	1	2.033	644159	98773	EXT	10.000	50.000	alpha-BHC
2	3	2.850	589777	69421	EXT	20.000	100.000	beta-BHC
3	5	3.317	892207	96578	EXT	15.000	75.000	delta-BHC
4	6	3.717	924876	84422	EXT	15.000	75.000	ALDRIN
5	8	6.005	887302	52306	EXT	15.000	75.000	a-CHLORDANE
6	9	6.542	915491	49331	EXT	15.000	75.000	g-CHLORDANE
7	11	7.683	1011980	49169	EXT	20.000	100.000	4,4' DDE
8	13	9.950	2184564	82464	EXT	50.000	250.000	ENDRIN
9	14	11.542	1023411	33451	EXT	25.000	125.000	4,4' DDD
10	18	18.417	2326685	47459	EXT	50.000	250.000	ENDOSULFAN SO4
11		21.317	238365	4462				
12	19	23.667	4126214	61558	EXT	100.000	500.000	DBC
13	20	25.050	1484743	24638	EXT	25.000	125.000	ENDRIN KETONE
TOTAL			17249773	754234		360.000	1800.000	

006251

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1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

Matrix: (soil/water) WATER

Lab Sample ID:

Sample wt/vol: 1000. (g/mL) ML

Lab File ID: 1214PWB

Level: (low/med) LOW

Date Received: 0/ 0/ 0

% Moisture: not dec. 0. dec. 0.

Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT

Date Analyzed: 1/ 6/88

GPC Cleanup: (Y/N) N pH: 7.0

Dilution Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	ALPHA-BHC	.05	U
319-85-7	BETA-BHC	.05	U
319-86-8	DELTA-BHC	.05	U
58-89-9	GAMMA-BHC	.05	U
76-44-8	HEPTACHLOR	.05	U
309-00-2	ALDRIN	.05	U
1024-57-3	HEPTACHLOR EPOXIDE	.05	U
959-98-8	ENDOSULFAN I	.05	U
60-57-1	DIELDRIN	.05	U
72-55-9	4,4'-DDE	.1	U
72-20-8	ENDRIN	.1	U
33213-65-9	ENDOSULFAN II	.1	U
72-54-8	4,4'-DDD	.1	U
1031-07-8	ENDOSULFAN SULFATE	.1	U
50-29-3	4,4'-DDT	.1	U
72-43-5	METHOXYCHLOR	.1	U
53494-70-5	ENDRIN KETONE	.5	U
5103-71-9	ALPHA CHLORDANE	1.	U
5103-74-2	GAMMA CHLORDANE	.5	U
8001-35-2	TOXAPHENE	.5	U
12674-11-2	AROCLOR-1016	1.	U
11104-28-2	AROCLOR-1221	.5	U
11141-16-5	AROCLOR-1232	.5	U
53469-21-9	AROCLOR-1242	.5	U
12672-29-6	AROCLOR-1248	.5	U
11097-69-1	AROCLOR-1254	.5	U
11096-82-5	AROCLOR-1260	1.	U

006252

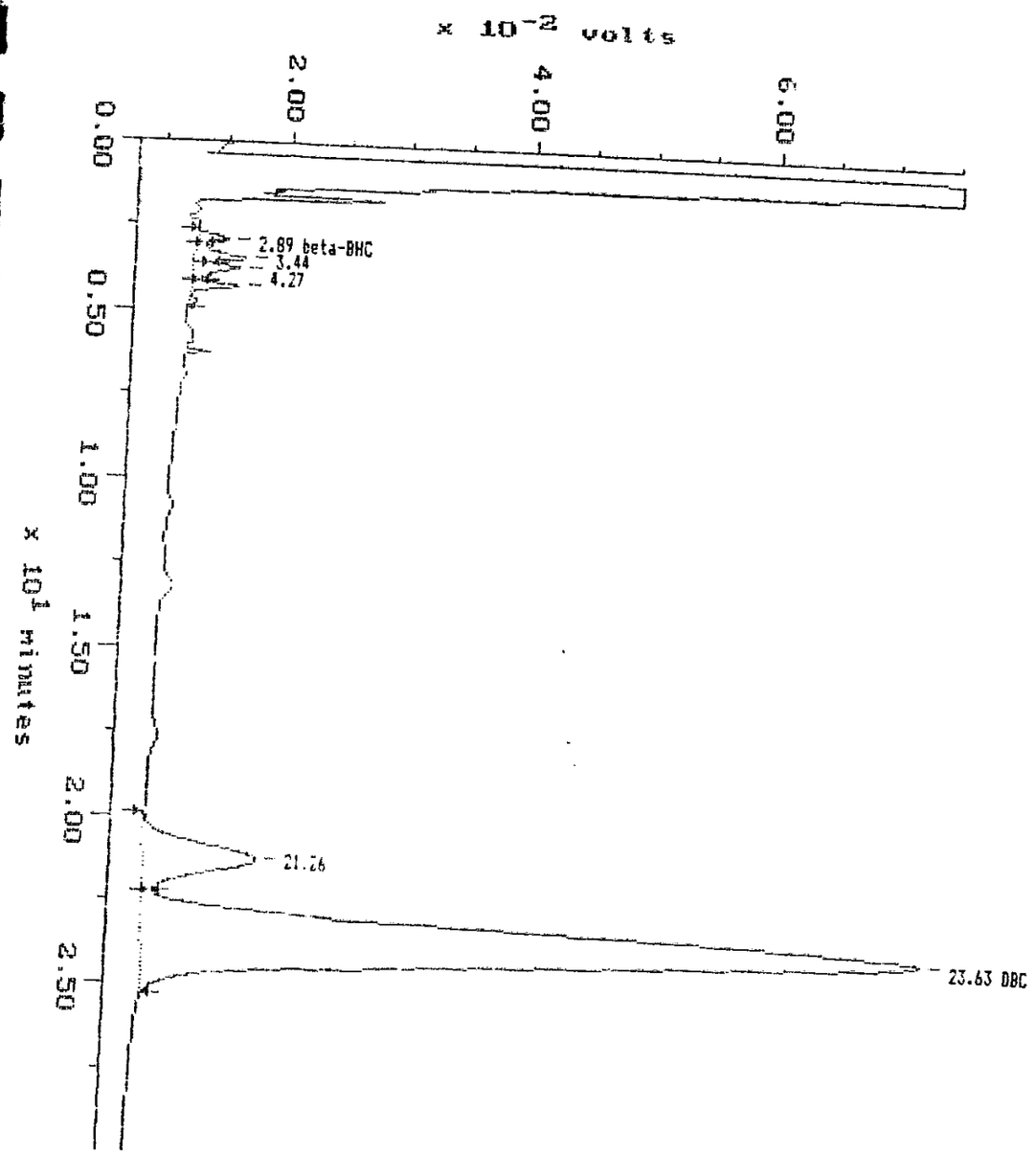
FORM I PEST

1/87 Rev.

Sample: PBLK
Acquired: 06-JAN-88 1:46
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 1000.000

Filename: 1214PWB
Operator: JDH
Inj Vol: 5.00



006253

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 15:11:26

SAMPLE: PBLK

#14 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 1:46
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: UNKN
Instrument: HP 5890 A
Filename: 1214PWB
Index: Disk
Injection Volume: 5.000
Dilution: 1.000
Amount: 1000.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Original Conc (ug/L)	Component Name
1	3	2.892	32686	2429	EXT	1.080*	0.011*	beta-BHC BELOW CRQL
2		3.442	63901	4088				
3	6	3.722	61796	3772	EXT	1.015*	0.010*	ALDRIN BELOW CRQL
4		4.267	55667	3828				
5		21.258	523023	8917				
6	19	23.625	4276862	63695	EXT	99.651*	0.997*	DBC
TAL			5013936	86730		101.746*		

* Result calculation was based on a manually entered response factor.

006254

230

006254

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MS

Lab Name: AATS Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: 16421MS

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec. 0. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/ 6/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.0000

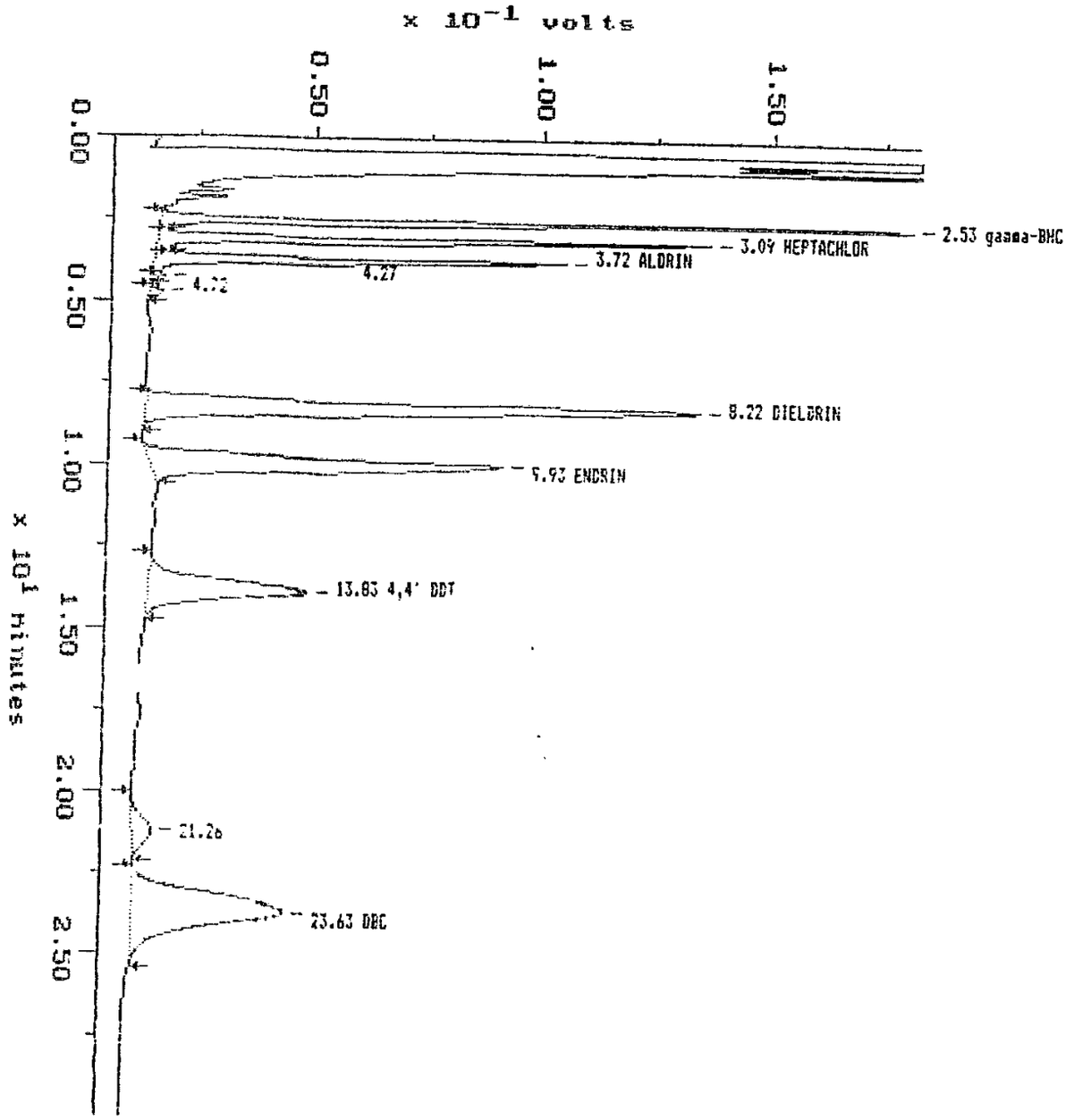
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	ALPHA-BHC	.08	U
319-85-7	BETA-BHC	.08	U
319-86-8	DELTA-BHC	.08	U
58-89-9	GAMMA-BHC	.4	
76-44-8	HEPTACHLOR	.3	
309-00-2	ALDRIN	.3	
1024-57-3	HEPTACHLOR EPOXIDE	.08	U
959-98-8	ENDOSULFAN I	.08	U
60-57-1	DIELDRIN	.9	
72-55-9	4,4'-DDE	.2	U
72-20-8	ENDRIN	.8	
33213-65-9	ENDOSULFAN II	.2	U
72-54-8	4,4'-DDD	.2	U
1031-07-8	ENDOSULFAN SULFATE	.2	U
50-29-3	4,4'-DDT	.6	
72-43-5	METHOXYCHLOR	.8	U
53494-70-5	ENDRIN KETONE	2.	U
5103-71-9	ALPHA CHLORDANE	.8	U
5103-74-2	GAMMA CHLORDANE	.8	U
8001-35-2	TOXAPHENE	2.	U
12674-11-2	AROCLOR-1016	.8	U
11104-28-2	AROCLOR-1221	.8	U
11141-16-5	AROCLOR-1232	.8	U
53469-21-9	AROCLOR-1242	.8	U
12672-29-6	AROCLOR-1248	.8	U
11097-69-1	AROCLOR-1254	2.	U
11096-82-5	AROCLOR-1260	2.	U

006255

Sample: FD732M5
Acquired: 06-JAN-88 3:10
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 600.000

Filename: 16421M5
Operator: JDH
Inj Vol: 5.00

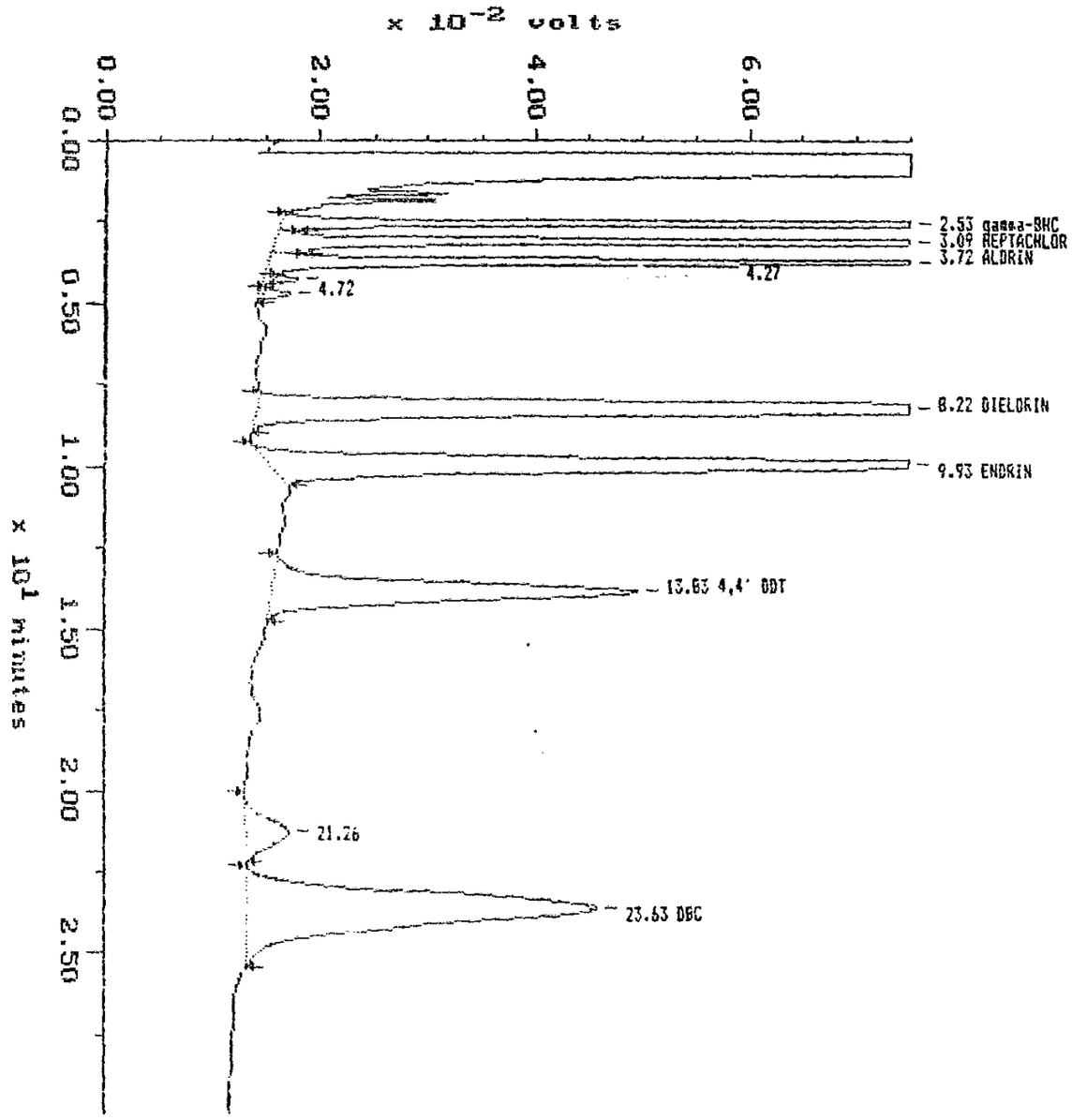


006256

Sample: FD732MS
Acquired: 06-JAN-88 3:10
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 600.000

Filename: 16421MS
Operator: JDH
Inj Vol: 5.00



006257

006257

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 15:19:11

SAMPLE: FD732MS

#16 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 3:10
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: UNKN
Instrument: HP 5890 A
Filename: 16421M5
Index: Disk
Injection Volume: 5.000
Dilution: 1.000
Amount: 600.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Original Conc (ug/L)	Component Name
1	2	2.533	1298599	164370	EXT	22.232*	0.371*	gamma-BHC
2	4	3.092	1217897	120766	EXT	19.145*	0.319*	HEPTACHLOR
3	6	3.717	1038197	89890	EXT	17.047*	0.284*	ALDRIN
4		4.267	23024	2337				
5		4.717	36677	2812				
6	12	8.217	2701578	121210	EXT	51.384*	0.856*	DIELDRIN
7	13	9.933	2021107	76749	EXT	50.851*	0.848*	ENDRIN
8	16	13.833	1296261	34200	EXT	37.825*	0.630*	4,4' DDT
9		21.758	220368	4007				
10	19	23.633	2180386	32759	EXT	50.803*	0.847*	DBC
TOTAL			12034094	649100		249.288*		

* Result calculation was based on a manually entered response factor.

006258

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006258

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FD732MSD

Lab Name: AATS

Contract: 68-01-7392

Lab Code: AATS Case No.: 8656 SAS No.: SDG No.: FD732

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

Sample wt/vol: 600. (g/mL) ML Lab File ID: 16421MD

Level: (low/med) LOW Date Received: 12/10/87

% Moisture: not dec. 0. dec. 0. Date Extracted: 12/14/87

Extraction: (SepF/Cont/Sonc) CONT Date Analyzed: 1/ 6/88

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.0000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	ALPHA-BHC	.08	U
319-85-7	BETA-BHC	.08	U
319-86-8	DELTA-BHC	.08	U
58-89-9	GAMMA-BHC	.4	
76-44-8	HEPTACHLOR	.3	
309-00-2	ALDRIN	.3	
1024-57-3	HEPTACHLOR EPOXIDE	.08	U
959-98-8	ENDOSULFAN I	.08	U
60-57-1	DIELDRIN	.9	
72-55-9	4,4'-DDE	.2	U
72-20-8	ENDRIN	.9	
33213-65-9	ENDOSULFAN II	.2	U
72-54-8	4,4'-DDD	.2	U
1031-07-8	ENDOSULFAN SULFATE	.2	U
50-29-3	4,4'-DDT	.6	
72-43-5	METHOXYCHLOR	.8	U
53494-70-5	ENDRIN KETONE	2.	U
5103-71-9	ALPHA CHLORDANE	.8	U
5103-74-2	GAMMA CHLORDANE	.8	U
8001-35-2	TOXAPHENE	2.	U
12674-11-2	AROCLOR-1016	.8	U
11104-28-2	AROCLOR-1221	.8	U
11141-16-5	AROCLOR-1232	.8	U
53469-21-9	AROCLOR-1242	.8	U
12672-29-6	AROCLOR-1248	.8	U
11097-69-1	AROCLOR-1254	2.	U
11096-82-5	AROCLOR-1260	2.	U

006259

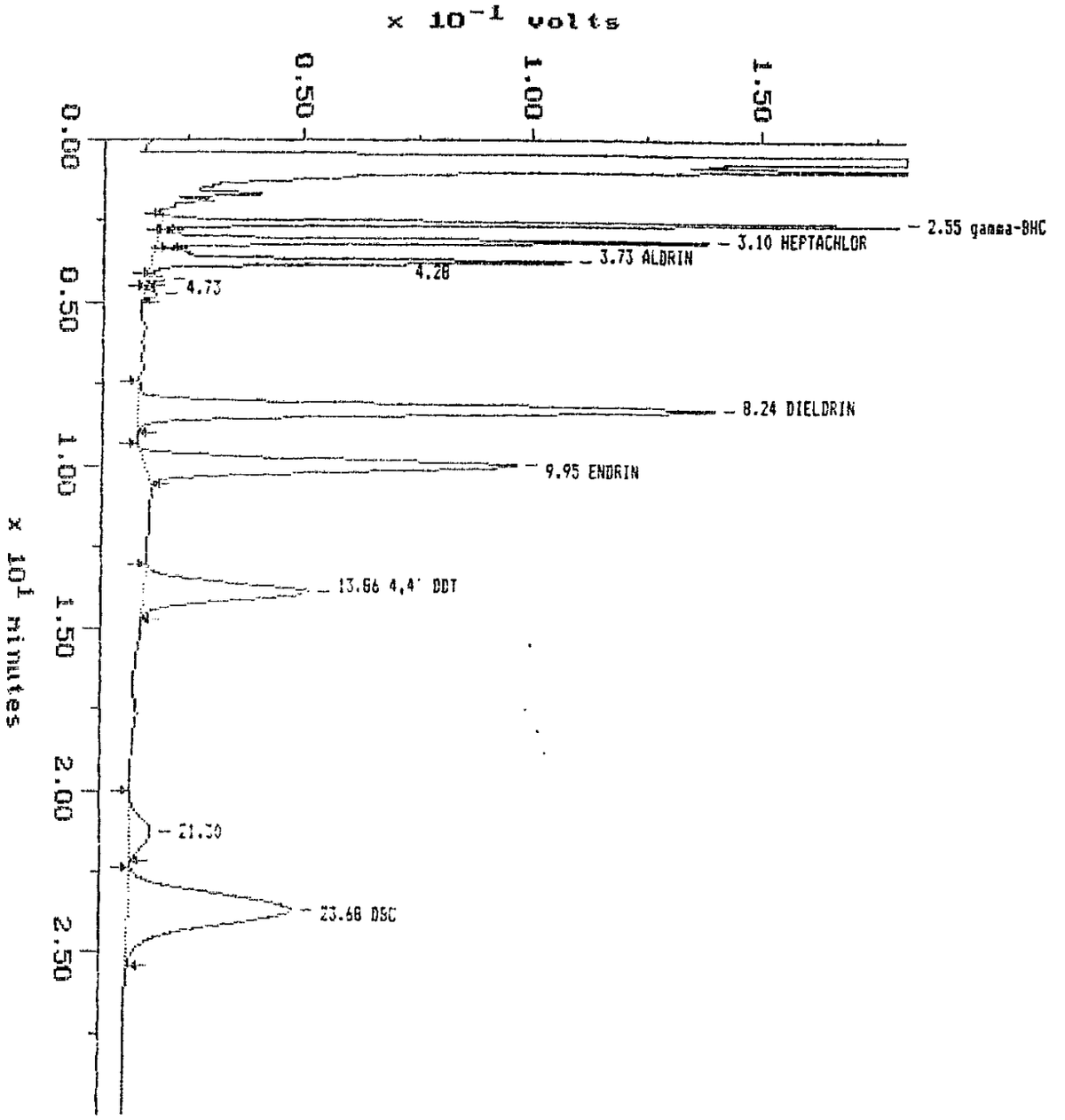
FORM I PEST

1/87 Rev.

Sample: FD732MSD
Acquired: 06-JAN-88 3:52
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 600.000

Filename: 16421MD
Operator: JDH
Inj Vol: 5.00

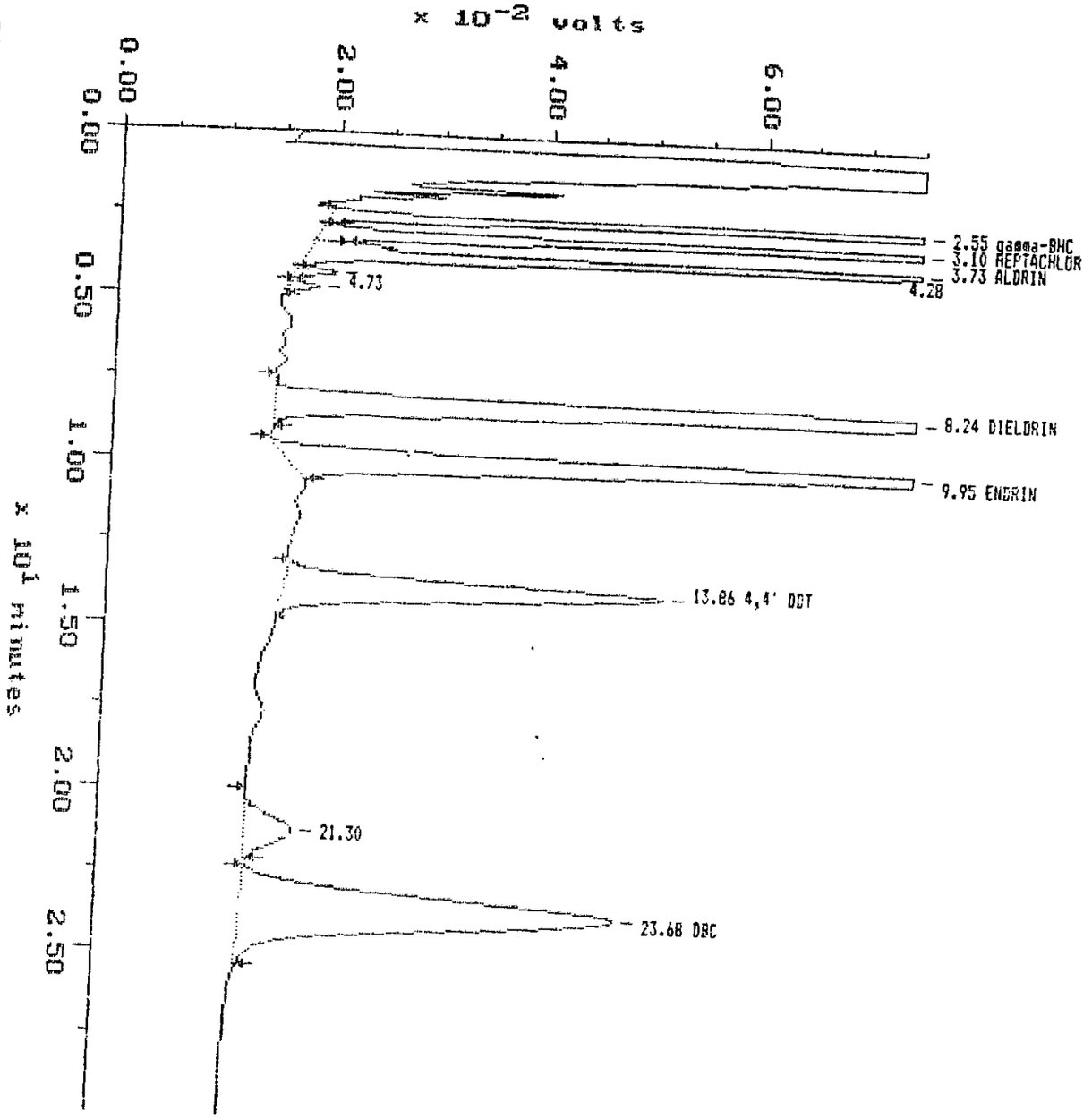


006260

Sample: FD732MSD
Acquired: 06-JAN-88 3:52
Dilution: 1 : 1.000
Comments: QUANTITATION RUN - MULTIPHASE COLUMN

Channel: HP5890A
Method: QUANT RUN - MULTIPHASE COL.
Amount: 600.000

Filename: 16421MD
Operator: JDH
Inj Vol: 5.00



006261

The Maxima Chromatography Workstation (c)1985 Dynamic Solutions Corporation

MAXIMA CUSTOM REPORT

Printed: 7-JAN-1988 15:22:15

SAMPLE: FD732MSD
#17 in Method: QUANT RUN - MULTIPHASE COL.
Acquired: 6-JAN-1988 3:52
Rate: 2.000 points/sec
Duration: 30.000 minutes
Operator: JDH

Type: UNKN
Instrument: HP 5890 A
Filename: 16421MD
Index: Disk
Injection Volume: 5.000
Dilution: 1.000
Amount: 600.000

DETECTOR: HP5890A

Pk#	Comp. #	Retention Time (minutes)	Peak Area (uvolts-sec)	Peak Height (uvolts)	Code	Solution Conc (ng/ml)	Original Conc (ug/L)	Component Name
1	2	2.550	1314197	160802	EXT	22.499*	0.375*	gamma-BHC
2	4	3.100	1228292	120585	EXT	19.309*	0.322*	HEPTACHLOR
3	6	3.725	1146277	91315	EXT	18.822*	0.314*	ALDRIN
4		4.283	30982	3027				
5		4.733	36772	2825				
6	12	8.242	2830752	125893	EXT	53.841*	0.897*	DIELDRIN
7	13	9.950	2135474	80799	EXT	53.729*	0.895*	ENDRIN
8	16	13.858	1318953	35724	EXT	38.487*	0.641*	4,4' DDT
9		21.300	243984	4404				
10	19	23.675	2349590	35229	EXT	54.745*	0.912*	DBC
TOTAL			12635272	660603		261.432*		

* Result calculation was based on a manually entered response factor.

006262

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