U.S. Environmental Protection Agency Region V

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Lab Data Reference Sheet

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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: 26 OCT 1988

SUBJECT: Review of Region 5 data for JOSTEN'S INC

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory J Thomas for

To: Data User: FIT

Attached are the results for:

CRL Data Set Numbers: SF-5541
Sample Numbers: 88FM30-S23 — S28
Parameter(s): VOA
Laboratory: CRL

Results Status:

(✓) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
( ) DATA UNACCEPTABLE FOR USE

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

S Griffin
OCT 26 1988

U.S. EPA CENTRAL
REGIONAL LAB

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

RECEIVED BY/DATE:
Comments:

DATA SET	SITE	DU/ACT.
SF-5541	JOSTEN'S INC	Y905 / C76100

SAMPLES	PARAMETER(S)
88FM30 S23 – S28	VOA

SAMPLED	RECEIVED	DUE	LAB
9/20/88	9/21/88	10/12/88	CRL

SHIPPED	DATA RECEIVED	CONTRACT

TEAM LEADER	SECTION CHIEF	QC COORD.	DATA COORD.

Comments By Reviewer: THE DATA SET CONSISTS OF 7 SAMPLES AND A FIELD BLANK. THE SAMPLES DID NOT GIVE ANY PROBLEMS IN ANALYSIS

QC: SPK AND SURROGATE RECOVERIES ARE SATISFACTORY. THE FIELD BLANK SHOWED CHLOROFORM, DICHLORO BROMO METHANE AND DIBROMO CHLORO METHANE. NONE OF THE SAMPLES SHOWED THESE COMPOUNDS.

P.C. Joseph
10-7-88

DATA MANAGEMENT COORDINATOR

RECEIVED	TRANSMITTED	
( ) REVIEWED	( ) UNREVIEWED	TEAM LEADER/DATE
(X) REVIEWED	( ) UNREVIEWED	SECTION CHIEF/DATE
	J Thomas	10/23/88
( ) REVIEWED	( ) UNREVIEWED	QC COORDINATOR/DATE

CLERICAL SUPPORT

RECEIVED	COMPLETED

REVIEWED BY CONTRACT COORDINATOR/DATE

RECEIVED	TRANSMITTED	DATA MANAGEMENT COORDINATOR
10/24/88	10/26/88	Sylvia Griffin

CC: QUALITY CONTROL COORDINATOR

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METHODBLANK

Study Name: JOSTENS
Data Set: SF-5541
Lab File ID: >TC340
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q
74-87-3	Chloromethane	2.	U
74-83-9	Bromomethane	2.	U
75-01-4	Vinyl Chloride	2.	U
75-00-3	Chloroethane	2.	U
75-09-2	Methylene Chloride	2.	U
107-02-8	Acrolein	35.	U
67-64-1	Acetone	35.	U
107-37-1	Acrylonitrile	35.	U
75-15-0	Carbon Disulfide	1.	U
75-35-4	1,1-Dichloroethene	1.	U
75-34-3	1,1-Dichloroethane	1.	U
156-60-5	1,2-Dichloroethene (total)	1.	U
67-66-3	Chloroform	1.	U
107-02-2	1,2-Dichloroethane	1.	U
78-93-3	2-Butanone	4.	U
71-55-6	1,1,1-Trichloroethane	1.	U
56-23-5	Carbon Tetrachloride	1.	U
108-05-4	Vinyl Acetate	15.	U
75-27-4	Bromodichloromethane	1.	U
78-87-5	1,2-Dichloropropane	1.	U
10061-01-5	cis-1,3-Dichloropropene	1.	U
79-01-6	Trichloroethene	1.	U
71-43-2	Benzene	1.	U
124-48-1	Dibromochloromethane	1.	U
10061-02-6	trans-1,3-Dichloropropene	1.	U
79-00-5	1,1,2-Trichloroethane	1.	U
110-75-8	2-Chloroethyl Vinylether	2.	U
75-25-2	Bromoform	2.	U
108-10-1	4-Methyl-2-pentanone	4.	U
591-78-6	2-Hexanone	4.	U
127-18-4	Tetrachloroethene	1.	U
79-34-5	1,1,2,2-Tetrachloroethane	1.	U
108-88-3	Toluene	1.	U
108-90-7	Chlorobenzene	1.	U
100-41-4	Ethylbenzene	1.	U
100-42-5	Styrene	1.	U
108-38-3	Meta Xylene	2.	U
108-38-3	O-&/or P-Xylene	2.	U

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

METHODBLANK

Study Name: JOSTENS

Data Set: SF-5541

Matrix: WATER

Lab File ID: >TC340

Date Received: 09/21/88

Dilution Factor: 1.00000

Date Analyzed: 9/22/88

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

Number TICs found: 1

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	80626	2-Propenoic acid, 2-methyl-,	19.86	3.	
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.					

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S23

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC345
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	X
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	X
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	X
156-60-5	1,2-Dichloroethene (total)	1.	U	X
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	X
78-93-3	2-Butanone	4.	U	
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	X
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	U	
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	X
10061-02-6	trans-1,3-Dichloropropene	1.	U	X
79-00-5	1,1,2-Trichloroethane	1.	U	X
110-75-8	2-Chloroethyl Vinylether	2.	U	X
75-25-2	Bromoform	2.	U	X
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	X
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	X
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	X
100-41-4	Ethylbenzene	1.	U	X
100-42-5	Styrene	1.	U	X
108-38-3	Meta Xylene	2.	U	X
108-38-3	O-&/or P-Xylene	2.	U	X

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S24

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC342
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	X
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	X
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	X
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	X
78-93-3	2-Butanone	4.	U	X
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	X
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	U	X
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	X
10061-02-6	trans-1,3-Dichloropropene	1.	U	X
79-00-5	1,1,2-Trichloroethane	1.	U	X
110-75-8	2-Chloroethyl Vinylether	2.	U	X
75-25-2	Bromoform	2.	U	X
108-10-1	4-Methyl-2-pentanone	4.	U	X
591-78-6	2-Hexanone	4.	U	X
127-18-4	Tetrachloroethene	1.	U	X
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	X
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	X
100-41-4	Ethylbenzene	1.	U	X
100-42-5	Styrene	1.	U	X
108-38-3	Meta Xylene	2.	U	X
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30D24

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC351
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	X
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	X
75-34-3	1,1-Dichloroethane	1.	U	X
156-60-5	1,2-Dichloroethene (total)	1.	U	X
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	X
78-93-3	2-Butanone	4.	U	
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	X
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	~~B~~	TCJ 11-4-88
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	X
10061-02-6	trans-1,3-Dichloropropene	1.	U	X
79-00-5	1,1,2-Trichloroethane	1.	U	X
110-75-8	2-Chloroethyl Vinylether	2.	U	
75-25-2	Bromoform	2.	U	
108-10-1	4-Methyl-2-pentanone	4.	U	X
591-78-6	2-Hexanone	4.	U	
127-18-4	Tetrachloroethene	1.	U	X
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	X
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	X
100-41-4	Ethylbenzene	1.	U	X
100-42-5	Styrene	1.	U	
108-38-3	Meta Xylene	2.	U	
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S25

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC343
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	X
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	
78-93-3	2-Butanone	4.	U	X
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	
78-87-5	1,2-Dichloropropane	1.	U	
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	U	
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	
10061-02-6	trans-1,3-Dichloropropene	1.	U	
79-00-5	1,1,2-Trichloroethane	1.	U	
110-75-8	2-Chloroethyl Vinylether	2.	U	X
75-25-2	Bromoform	2.	U	
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	X
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	
100-41-4	Ethylbenzene	1.	U	
100-42-5	Styrene	1.	U	
108-38-3	Meta Xylene	2.	U	
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S26

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC348
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	X
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	X
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	
78-93-3	2-Butanone	4.	U	
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	X
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	U	
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	X
10061-02-6	trans-1,3-Dichloropropene	1.	U	X
79-00-5	1,1,2-Trichloroethane	1.	U	X
110-75-8	2-Chloroethyl Vinylether	2.	U	X
75-25-2	Bromoform	2.	U	
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	X
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	X
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	X
100-41-4	Ethylbenzene	1.	U	
100-42-5	Styrene	1.	U	
108-38-3	Meta Xylene	2.	U	
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S27

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC349
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	
75-34-3	1,1-Dichloroethane	1.	U	
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	
78-93-3	2-Butanone	4.	U	X
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	
10061-01-5	cis-1,3-Dichloropropene	1.	U	
79-01-6	Trichloroethene	1.	U	
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	
10061-02-6	trans-1,3-Dichloropropene	1.	U	
79-00-5	1,1,2-Trichloroethane	1.	U	
110-75-8	2-Chloroethyl Vinylether	2.	U	
75-25-2	Bromoform	2.	U	
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	
100-41-4	Ethylbenzene	1.	U	
100-42-5	Styrene	1.	U	
108-38-3	Meta Xylene	2.	U	
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30S28

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC350
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q	
74-87-3	Chloromethane	2.	U	
74-83-9	Bromomethane	2.	U	
75-01-4	Vinyl Chloride	2.	U	
75-00-3	Chloroethane	2.	U	
75-09-2	Methylene Chloride	2.	U	X
107-02-8	Acrolein	35.	U	
67-64-1	Acetone	35.	U	X
107-37-1	Acrylonitrile	35.	U	
75-15-0	Carbon Disulfide	1.	U	X
75-35-4	1,1-Dichloroethene	1.	U	X
75-34-3	1,1-Dichloroethane	1.	U	X
156-60-5	1,2-Dichloroethene (total)	1.	U	
67-66-3	Chloroform	1.	U	X
107-02-2	1,2-Dichloroethane	1.	U	X
78-93-3	2-Butanone	4.	U	
71-55-6	1,1,1-Trichloroethane	1.	U	X
56-23-5	Carbon Tetrachloride	1.	U	
108-05-4	Vinyl Acetate	15.	U	X
75-27-4	Bromodichloromethane	1.	U	X
78-87-5	1,2-Dichloropropane	1.	U	X
10061-01-5	cis-1,3-Dichloropropene	1.	U	X
79-01-6	Trichloroethene	1.	~~U~~	T<3 11-4-88
71-43-2	Benzene	1.	U	X
124-48-1	Dibromochloromethane	1.	U	X
10061-02-6	trans-1,3-Dichloropropene	1.	U	
79-00-5	1,1,2-Trichloroethane	1.	U	X
110-75-8	2-Chloroethyl Vinylether	2.	U	
75-25-2	Bromoform	2.	U	X
108-10-1	4-Methyl-2-pentanone	4.	U	
591-78-6	2-Hexanone	4.	U	X
127-18-4	Tetrachloroethene	1.	U	
79-34-5	1,1,2,2-Tetrachloroethane	1.	U	X
108-88-3	Toluene	1.	U	X
108-90-7	Chlorobenzene	1.	U	X
100-41-4	Ethylbenzene	1.	U	X
100-42-5	Styrene	1.	U	
108-38-3	Meta Xylene	2.	U	
108-38-3	O-&/or P-Xylene	2.	U	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

U.S. EPA - REGION V

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

88FM30R02

Study Name: JOSTEN'S INC

Data Set: SF-5541

Matrix: WATER

Lab File ID: >TC344

Date Received: 09/21/88

Dilution Factor: 1.00000

Date Analyzed: 9/22/88

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

Number TICs found: 2

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	75285	Propane, 2-methyl- (8CI9CI)	5.98	20.	
2.	623438	2-Butenoic acid, methyl este	19.87	3.	
3.					
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5.					
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U.S. EPA - REGION V
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

88FM30R02

Study Name: JOSTEN'S INC
Data Set: SF-5541
Lab File ID: >TC344
Dilution Factor: 1.00000

Matrix: WATER
Date Received: 09/21/88
Date Analyzed: 9/22/88

CONCENTRATION UNITS:

CAS NO.	COMPOUND	ug/L	Q		
74-87-3	Chloromethane	2.	U		
74-83-9	Bromomethane	2.	U		
75-01-4	Vinyl Chloride	2.	U		
75-00-3	Chloroethane	2.	U		
75-09-2	Methylene_Chloride	2.	U	X	
107-02-8	Acrolein	35.	U	X	
67-64-1	Acetone	35.	U	X	
107-37-1	Acrylonitrile	35.	U		
75-15-0	Carbon Disulfide	1.	U	X	
75-35-4	1,1-Dichloroethene	1.	U		
75-34-3	1,1-Dichloroethane	1.	U		
156-60-5	1,2-Dichloroethene_(total)	1.	U		
67-66-3	Chloroform	35.			
107-02-2	1,2-Dichloroethane	1.	U		
78-93-3	2-Butanone	4.	U	X	
71-55-6	1,1,1-Trichloroethane	1.	U	X	
56-23-5	Carbon Tetrachloride	1.	U		
108-05-4	Vinyl Acetate	15.	U		
75-27-4	Bromodichloromethane	7.			
78-87-5	1,2-Dichloropropane	1.	U		
10061-01-5	cis-1,3-Dichloropropene	1.	U	X	
79-01-6	Trichloroethene	1.	U	X	
71-43-2	Benzene	1.	U	X	
124-48-1	Dibromochloromethane	3.	~~B~~		TCJ 11-4-88
10061-02-6	trans-1,3-Dichloropropene	1.	U	X	
79-00-5	1,1,2-Trichloroethane	1.	U	X	
110-75-8	2-Chloroethyl_Vinylether	2.	U	X	
75-25-2	Bromoform	2.	U	X	
108-10-1	4-Methyl-2-pentanone	4.	U	X	
591-78-6	2-Hexanone	4.	U		
127-18-4	Tetrachloroethene	1.	U		
79-34-5	1,1,2,2-Tetrachloroethane	1.	U		
108-88-3	Toluene	1.	U	X	
108-90-7	Chlorobenzene	1.	U		
100-41-4	Ethylbenzene	1.	U	X	
100-42-5	Styrene	1.	U	X	
108-38-3	Meta Xylene	.7	JB		
108-38-3	O-&/or P-Xylene	2.	U	X	

Data Qualifiers: U = Compounds were analyzed but not detected. The value reported is the method detection limit for reagent water.
J = Estimated.
X = Result rejected for failing mass spectral confirmation.
E = Concentration exceeded calibration range.

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH SUPERFUND FIT SAMPLE DATE 9/20/88 LAB ARRIVAL DATE 9/21/88 DUE DATE 10/12/88

DU NUMBER 4905 C76100 DATA SET NUMBER 5541 STUDY Josten's Inc PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION Sample#	TAG#	WATER VOLATILE ORGANICS SCAN UG/L TOX 17684	WATER ABN ORGANICS SCAN UG/L TOX 17674	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
88FM30R02	Blank	5-155646,47	✓			
88FM30523	RW1	5-155629,30, 34,33,31,32	✓			
88FM30524	RW2	5-155653,54	✓			
88FM30525	RW3	5-155667,68	✓			
88FM30526	RW4	5-155674,75	✓			
88FM30527	RW5	5-155681,82	✓			
88FM30528	RW6	5-155688,89	✓			
88FM30D24	duplicate	5-155660,61	✓			
88FM30R02	Blank	5-155648,49		✓		
88FM30523	RW1	5-155635,36, 37,38,39,40		✓		
88FM30524	RW2	5-155655,56		✓		
88FM30525	RW3	5-155664,70		✓		
88FM30526	RW4	5-155676,77		✓		
88FM30527	RW5	5-155683,84		✓		
88FM30528	RW6	5-155690,91		✓		
88FM30D24	duplicate	5-155662,63		✓		

completed Jes 10-7-88

U.S. EPA CENTRAL REGIONAL LAB

QUALITY CONTROL SHEET
TOXIC ORGANICS SECTION: VOLATILES

STUDY NAME JOSTEN'S INC.
STUDY NUMBER SF-5541

DATE 9/22/88

ACTIVITY NUMBER C 76100
ANALYST TCJ

FRN	SAMPLE NUMBER	MATRIX	AMOUNT PURGED	DILUTIONS	FINAL VOL (AFT. DILU	INTERNAL STD CONC. (10 PPB) BCM BP AREA	BCP BP AREA	DCB BP AREA	SURROGATES RECOVERY % D4-1,2-DCE	D6-Benzene	D8-Toluene
>TC340	MB	WATER	20 ML	NONE	20 ML	86913	372800	247708	95	98	101
>TC341	VOA-STD	↓	↓	↓	↓	122907	501650	330483	–	–	–
>TC342	88FM30-S24	↓	↓	↓	↓	144993	582275	403724	89	97	95
>TC343	88FM30 S25	↓	↓	↓	↓	143427	568003	400237	88	96	93
>TC344	88FM30 RO2	↓	↓	↓	↓	104059	406003	281731	90	99	98
>TC345	88FM30 S23	↓	↓	↓	↓	136690	548180	374491	91	99	99
>TC346	88FM30 S23MS	↓	↓	↓	↓	145618	578970	408779	96	98	94
>TC347	88FM30S23MSD	↓	↓	↓	↓	147996	580947	417403	97	99	92
>TC348	88FM30-S26	↓	↓	↓	↓	151820	599495	425029	90	93	90
>TC349	88FM30-S27	↓	↓	↓	↓	152276	591588	427958	89	96	91
>TC350	88FM30-S28	↓	↓	↓	↓	150634	582348	416166	89	96	92
>TC351	88FM30-D24	↓	↓	↓	↓	150339	578373	419652	89	96	90

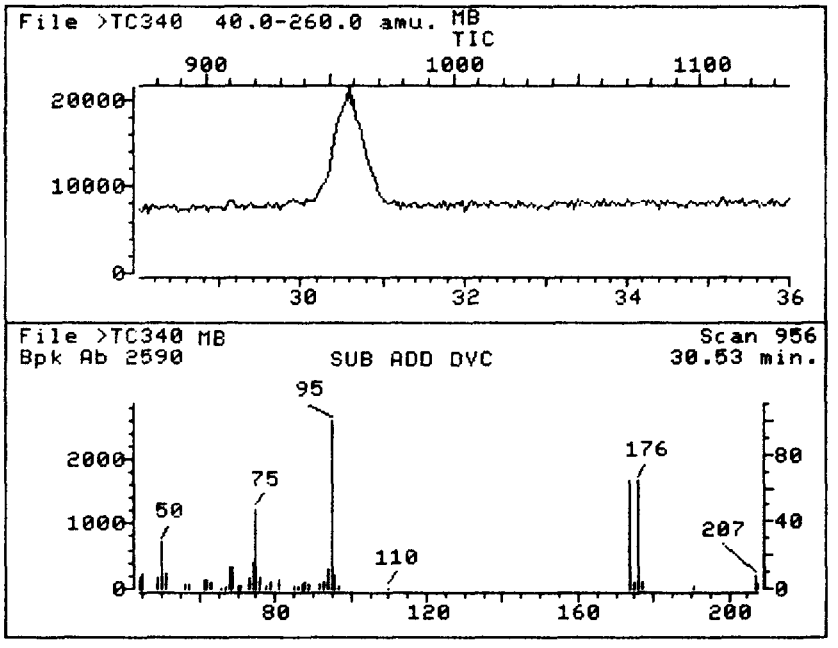
QUALITY CONTROL SHEET
TOXIC ORGANIC SECTION: VOLATILES

STUDY NAME JOSTENS INC ACTIVITY NUMBER C76100 ANALYST TCJ

STUDY NUMBER SF-5541

SUMMARY: BLANKS DATA

#	FRN	DATE	BLANK TYPE	COMPOUNDS DETECTED	ESTIMATED CONCENTRATION (PPB)	STD USED
1.	>TC340	9/22/88	MB	BUTENOIC 2-~~PROPENOIC~~ ACID, ~~2-METHYL~~, METHYL ~~ESTER~~	3.0	BCM
2.	>TC344	9/22/88	88FM30RO2 (Field Blank)	ISO BUTANE	20	BCM
				CHLOROFORM	35	"
				DICHLOROBROMO METHANE	6.6	BCP
				DIBROMO CHLORO METHANE	2.6	"
				2-BUTENOIC ACID, METHYL ESTER	3.0	"
3.						
4.						



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	27.45	27.45	Ok
75	30-60% of mass 95	47.08	47.08	Ok
95	Base peak, 100% relative abundance	100.00	100.00	Ok
96	5-9% of mass 95	7.41	7.41	Ok
173	Less than 2% of mass 174	0.00	0.00	Ok
174	Greater than 50% of mass 95	63.98	63.98	Ok
175	5-9% of mass 174	3.44	5.37	Ok
176	95-101% of mass 174	64.36	100.60	Ok
177	5-9% of mass 176	3.63	5.64	Ok

Injection Date: 09/22/88
Injection Time: 09:40

Calibration Report

Title: 10 FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Calibrated: 881003 16:22

Compound	Files: >TC314 RF 5.00	>TC315 RF 10.00	>TC312 RF 15.00	>TC316 RF 20.00	>TC317 RF 25.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
CHLOROMETHANE	2.53090	1.90972	2.16250	1.80903	1.67367	.193	2.01716	16.773	(Conc=10.0,15.0,20.0,25.0,30.0)
BROMOMETHANE	4.51865	4.84990	4.57303	4.50214	4.43257	.285	4.57526	3.530	(Conc=10.0,15.0,20.0,25.0,30.0)
VINYL CHLORIDE	4.93503	4.68239	4.46906	4.27645	4.20409	.359	4.51340	6.648	(Conc=10.0,15.0,20.0,25.0,30.0)
CHLOROETHANE	2.79928	2.96389	2.83443	2.69727	2.62323	.457	2.78362	4.701	(Conc=10.0,15.0,20.0,25.0,30.0)
METHYLENE CHLORIDE	2.54056	2.62219	2.41372	2.44782	2.55703	.669	2.51626	3.365	(Conc=5.0,10.0,15.0,20.0,25.0)
ACROLEIN	.05104	.09137	.12699	.10056	.12680	.735	.09935	31.494	(Conc=225.5,300.0,375.0,450.0,525.
ACETONE	.22737	.23078	.22524	.22759	.24532	.736	.23126	3.504	(Conc=225.0,300.0,375.0,450.0,525.
ACRYLONITRILE	.29627	.32273	.31369	.32700	.35395	.803	.32273	6.527	(Conc=225.0,300.0,375.0,450.0,525.
CARBON DISULFIDE	10.3050	10.0999	10.3605	10.2128	10.5434	.821	10.3043	1.613	(Conc=7.5,10.0,12.5,15.0,17.5)
1,1-DICHLOROETHENE	2.38354	2.40834	2.32607	2.37795	2.43662	.953	2.38651	1.718	(Conc=5.0,10.0,15.0,20.0,25.0)
1,1-DICHLOROETHANE	5.15706	5.38776	5.12081	5.13809	5.35961	1.081	5.23267	2.480	(Conc=5.0,10.0,15.0,20.0,25.0)
1,2-DICHLOROETHENE (TOTAL)	2.58588	2.67181	2.55520	2.60289	2.66193	1.159	2.61554	1.912	(Conc=5.0,10.0,15.0,20.0,25.0)
CHLOROFORM	4.63064	4.79076	5.04255	4.57144	4.75050	1.217	4.75718	3.835	(Conc=5.0,10.0,15.0,20.0,25.0)
1,2-DICHLOROETHANE-D4	1.34959	1.35976	1.43430	1.48911	1.54368	1.281	1.43529	5.797	(Conc=10.0,10.0,10.0,10.0,10.0)
1,2-DICHLOROETHANE	1.93987	1.91138	1.79562	1.84242	1.92301	1.291	1.88246	3.245	(Conc=5.0,10.0,15.0,20.0,25.0)
2-BUTANONE	.02066	.02178	.02126	.02181	.02338	.664	.02178	4.637	(Conc=75.0,100.0,125.0,150.0,175.0
1,1,1-TRICHLOROETHANE	1.00801	.94059	.93334	.89763	.93497	.733	.94291	4.258	(Conc=5.0,10.0,15.0,20.0,25.0)
CARBON TETRACHLORIDE	.73628	.74531	.72297	.72397	.75100	.753	.73591	1.700	(Conc=5.0,10.0,15.0,20.0,25.0)
V ACETATE	.13703	.19959	.39658	.13052	.19746	.766	.21224	50.907	(Conc=22.5,30.0,37.5,45.0,52.5)
BROMODICHLOROMETHANE	.92446	.94876	.91328	.93831	1.01337	.783	.94764	4.130	(Conc=5.0,10.0,15.0,20.0,25.0)
1,2-DICHLOROPROPANE	.77848	.81550	.77005	.77702	.83275	.855	.79476	3.482	(Conc=5.0,10.0,15.0,20.0,25.0)
CIS-1,3-DICHLOROPROPENE	.81276	.86075	.80336	.83948	.89119	.869	.84151	4.253	(Conc=7.0,14.0,21.0,28.0,35.0)
TRICHLOROETHENE	.59856	.63107	.60933	.69498	.71176	.899	.64914	7.890	(Conc=5.0,10.0,15.0,20.0,25.0)
BENZENE-D6	1.97794	1.97264	2.01342	1.97994	2.00749	.918	1.99029	.941	(Conc=10.0,10.0,10.0,10.0,10.0)
BENZENE	2.11036	2.30042	2.23559	2.36113	2.55981	.926	2.31346	7.183	(Conc=5.0,10.0,15.0,20.0,25.0)
DIBROMOCHLOROMETHANE	.49448	.52055	.48899	.53053	.58350	.930	.52361	7.204	(Conc=5.0,10.0,15.0,20.0,25.0)
TRANS-1,3-DICHLOROPROPENE	.75979	.79018	.76053	.78008	.85055	.937	.78823	4.717	(Conc=3.0,6.0,9.0,12.0,15.0)
1,1,2-TRICHLOROETHANE	.32890	.34583	.32136	.35268	.38317	.937	.34639	6.960	(Conc=5.0,10.0,15.0,20.0,25.0)
2-CHLOROETHYL VINYLETHER	.26096	.25532	.23289	.24056	.25176	.995	.24830	4.588	(Conc=5.0,10.0,15.0,20.0,25.0)
BROMOFORM	.25872	.26908	.24468	.26711	.28711	1.073	.26534	5.844	(Conc=5.0,10.0,15.0,20.0,25.0)
4-METHYL-2-PENTANONE	.47838	.50957	.47112	.47272	.51659	.907	.48967	4.426	(Conc=15.0,20.0,25.0,30.0,35.0)
2-HEXANONE	.32366	.34806	.37460	.33548	.37921	.975	.35220	6.871	(Conc=15.0,20.0,25.0,30.0,35.0)
TETRACHLOROETHENE	.63874	.69615	.64373	.71448	.78439	.991	.69550	8.555	(Conc=5.0,10.0,15.0,20.0,25.0)
1,1,2,2-TETRACHLOROETHANE	.68252	.70924	.63377	.61076	.74244	.987	.67574	7.970	(Conc=5.0,10.0,15.0,20.0,25.0)
TOLUENE-D8	1.35869	1.37890	1.35832	1.34308	1.36048	1.040	1.35989	.936	(Conc=10.0,10.0,10.0,10.0,10.0)
TOLUENE	1.61933	1.76443	1.62217	1.69935	1.84430	1.048	1.70992	5.628	(Conc=5.0,10.0,15.0,20.0,25.0)
CHLOROBENZENE	1.55255	1.69205	1.52683	1.62442	1.76937	1.100	1.63304	6.116	(Conc=5.0,10.0,15.0,20.0,25.0)
ETHYLBENZENE	.93268	.99578	.90453	.93953	.99440	1.202	.95338	4.224	(Conc=5.0,10.0,15.0,20.0,25.0)
STYRENE	2.01986	2.15875	2.04852	2.06498	2.23750	1.429	2.10592	4.279	(Conc=7.5,10.0,12.5,15.0,17.5)

2 outliers

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Report

Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Calibrated: 881003 16:22

Compound	Files: >TC314 RF 5.00	>TC315 RF 10.00	>TC312 RF 15.00	>TC316 RF 20.00	>TC317 RF 25.00	$\overline{RRT}$	$\overline{RF}$	% RSD	
META XYLENE	1.70946	1.57789	1.52177	1.52131	1.65864	1.448	1.59782	5.255	(Conc=10.0,20.0,30.0,40.0,50.0)
O-&/OR P-XYLENE	1.71508	1.59198	1.53955	1.55257	1.69360	1.505	1.61856	5.005	(Conc=12.5,25.1,37.6,50.1,62.7)

RF - Response Factor (Subscript is amount in UG/L)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

Calibration Check Report

Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Calibrated: 881003 16:22

Check Standard Data File: >TC341
Injection Time: 880922 10:38

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
CHLOROMETHANE	2.01716	4.17525	106.99	Average	(Conc=20.00) ←
BROMOMETHANE	4.57526	5.18075	13.23	Average	(Conc=20.00)
VINYL CHLORIDE	4.51340	5.96171	32.09	Average	(Conc=20.00) ←
CHLOROETHANE	2.78362	3.37709	21.32	Average	(Conc=20.00)
METHYLENE CHLORIDE	2.51626	2.64565	5.14	Average	(Conc=15.00)
ACROLEIN	.09935	.06811	31.45	Average	(Conc=375.00) ←
ACETONE	.23126	.20935	9.47	Average	(Conc=375.00)
ACRYLONITRILE	.32273	.30000	7.04	Average	(Conc=375.00)
CARBON DISULFIDE	10.3043	11.4314	10.94	Average	(Conc=12.50)
1,1-DICHLOROETHENE	2.38651	2.75574	15.47	Average	(Conc=15.00)
1,1-DICHLOROETHANE	5.23267	5.90271	12.80	Average	(Conc=15.00)
1,2-DICHLOROETHENE (TOTAL)	2.61554	2.87189	9.80	Average	(Conc=15.00)
CHLOROFORM	4.75718	5.17343	8.75	Average	(Conc=15.00)
1,2-DICHLOROETHANE-D4	1.43529	1.44961	1.00	Average	(Conc=10.00)
1,2-DICHLOROETHANE	1.88246	1.94734	3.45	Average	(Conc=15.00)
2-BUTANONE	.02178	.01841	15.47	Average	(Conc=125.00)
1,1,1-TRICHLOROETHANE	.94291	1.04607	10.94	Average	(Conc=15.00)
CARBON TETRACHLORIDE	.73591	.85702	16.46	Average	(Conc=15.00)
VINYL ACETATE	.21224	.17143	19.23	Average	(Conc=37.50)
BROMODICHLOROMETHANE	.94764	.96811	2.16	Average	(Conc=15.00)
1,2-DICHLOROPROPANE	.79476	.82921	4.34	Average	(Conc=15.00)
CIS-1,3-DICHLOROPROPENE	.84151	.84150	.00	Average	(Conc=21.00)
TRICHLOROETHENE	.64914	.68231	5.11	Average	(Conc=15.00)
BENZENE-D6	1.99029	2.05255	3.13	Average	(Conc=10.00)
BENZENE	2.31346	2.38190	2.96	Average	(Conc=15.00)
DIBROMOCHLOROMETHANE	.52361	.50649	3.27	Average	(Conc=15.00)
TRANS-1,3-DICHLOROPROPENE	.78823	.79018	.25	Average	(Conc=9.00)
1,1,2-TRICHLOROETHANE	.34639	.32246	6.91	Average	(Conc=15.00)
2-CHLOROETHYL VINYLETHER	.24830	.23549	5.16	Average	(Conc=15.00)
BROMOFORM	.26534	.23968	9.67	Average	(Conc=15.00)
4-METHYL-2-PENTANONE	.48967	.45230	7.63	Average	(Conc=25.00)
2-HEXANONE	.35220	.30614	13.08	Average	(Conc=25.00)
TETRACHLOROETHENE	.69550	.81680	17.44	Average	(Conc=15.00)
1,1,2,2-TETRACHLOROETHANE	.67574	.67893	.47	Average	(Conc=15.00)
TOLUENE-D8	1.35989	1.50982	11.03	Average	(Conc=10.00)
TOLUENE	1.70992	1.91889	12.22	Average	(Conc=15.00)
CHLOROBENZENE	1.63304	1.85998	13.90	Average	(Conc=15.00)
ETHYLBENZENE	.95338	1.09435	14.79	Average	(Conc=15.00)
STYRENE	2.10592	2.31996	10.16	Average	(Conc=12.50)
META XYLENE	1.59782	1.77749	11.25	Average	(Conc=30.00)

RF - Response Factor from daily standard file at 15.00 UG/L

3 OUTLIERS

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Calibration Check Report

Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Calibrated: 881003 16:22

Check Standard Data File: >TC341
Injection Time: 880922 10:38

Compound	$\overline{RF}$	RF	%Diff	Calib Meth	
O-&/OR P-XYLENE	1.61856	1.79105	10.66	Average	(Conc=37.60)

RF - Response Factor from daily standard file at 15.00 UG/L

$\overline{RF}$ - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Central Regional Laboratory
U.S. Environmental Protection Agency
536 South Clark Street
Chicago, Illinois 60605
(312) 353-8370

QUALITY CONTROL SHEET

Duplicate Matrix Spike and Sample Duplicate

Study No. SF-5541
Study Name JOSTEN'S INC.
Spike Level 10 ppb

Activity No. C76100
Lab Sample I.D. 88FM30-S23

Volatiles FRN:			>TC346	>TC347	RPD
	PPB	PPB	%	%	
1. Chloromethane					
2. Bromomethane					
3. Vinyl chloride					
4. Chloroethane					
5. Methylene chloride			96	90	6
6. Acrolein					
7. Acetone					
8. Acrylonirile					
9. Carbon disulfide					
10. 1,1-Dichloroethylene			93	86	7
11. Bromochloromethane (Int. Std.)					
12. 1,1-Dichloroethane			96	86	10
13. 1,2-Dichloroethylene			94	87	7
14. Chloroform			96	86	10
15. 2-Butanone					
16. 1,2-Dichloroethane			99	97	2
17. 1,1,1-Trichloroethane			94	87	7
18. Carbon tetrachloride			96	89	7
19. Vinyl acetate			~~10~~	~~101~~	
20. Dichlorobromomethane			101	95	6
21. 1,2-Dichloropropane			101	94	7
22. 1,2-Dichloro-1-propene (Trans)			103	97	6
23. Trichloroethylene			99	91	8
24. Benzene			97	90	7
25. Dibromochloromethane			104	100	4
26. 1,1,2-Trichloroethane			105	105	–
27. 1,3-Dichloro-1-propene (CIS)			101	94	7
28. 2-Chloroethyl vinyl ether			107	104	3
29. Bromoform			108	107	1
30. 4-methyl-2-pentanone					
31. 2-Hexanone					
32. Tetrachloroethylene			93	83	10
33. 1,1,2,2-Tetrachloroethane			99	94	5
34. 1,4-Dichlorobutane (Int. Std.)					
35. Toluene			93	86	7
36. Chlorobenzene			96	87	9
37. Ethylbenzene			94	85	9
38. Styrene					
39. m-xylene					
40. o/p-xylene					

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 881007 07:53
Output File: ^TC346::QT Injected at: 880922 15:43
Data File: >TC346::A9 Dilution Factor: 1.00000
Name: 88FM30 S23MS
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 881006 15:22

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	145618	10.00	UG/L	69
5)	CHLOROETHANE	4.49	99	3685	.07	UG/L	91
6)	METHYLENE CHLORIDE	6.50	165	369508	9.59	UG/L	83
8)	ACETONE	7.17	187	8841	2.90	UG/L	75
10)	CARBON DISULFIDE	8.02	215	12704	.08	UG/L	100
11)	1,1-DICHLOROETHENE	9.26	256	372448	9.28	UG/L	80
12)	1,1-DICHLOROETHANE	10.51	297	823565	9.58	UG/L	95
13)	1,2-DICHLOROETHENE (TOTAL)	11.27	322	392920	9.40	UG/L	81
14)	CHLOROFORM	11.85	341	720338	9.56	UG/L	99
15)	1,2-DICHLOROETHANE-D4	12.45	361	202823	9.61	UG/L	90
16)	1,2-DICHLOROETHANE	12.55	364	279996	9.87	UG/L	92
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.81	570	578970	10.00	UG/L	99
18)	2-BUTANONE	12.45	361	1736	1.63	UG/L	97
19)	1,1,1-TRICHLOROETHANE	13.79	405	569348	9.40	UG/L	99
20)	CARBON TETRACHLORIDE	14.19	418	473761	9.55	UG/L	99
22)	BROMODICHLOROMETHANE	14.73	436	565742	10.09	UG/L	98
23)	1,2-DICHLOROPROPANE	16.07	480	483912	10.08	UG/L	97
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	683404	14.03	UG/L	99
25)	TRICHLOROETHENE	16.92	508	389971	9.87	UG/L	98
26)	BENZENE-D6	17.26	519	1159025	9.75	UG/L	98
27)	BENZENE	17.41	524	1339157	9.71	UG/L	99
28)	DIBROMOCHLOROMETHANE	17.50	527	303937	10.36	UG/L	94
29)	TRANS-1,3-DICHLOROPROPENE	17.62	531	282738M	6.18	UG/L	
30)	1,1,2-TRICHLOROETHANE	17.62	531	196388	10.52	UG/L	99
31)	2-CHLOROETHYL VINYLETHER	18.72	567	146089	10.72	UG/L	93
32)	BROMOFORM	20.18	615	150202	10.82	UG/L	99
33)	*1,4-DICHLOROBUTANE (IS-3)	22.82	702	408779	10.00	UG/L	92
34)	4-METHYL-2-PENTANONE	20.72	633	3688	.20	UG/L	75
36)	TETRACHLOROETHENE	22.61	695	311901	9.34	UG/L	97
37)	1,1,2,2-TETRACHLOROETHANE	22.55	693	274196	9.88	UG/L	97
38)	TOLUENE-D8	23.73	732	578776	9.38	UG/L	99
39)	TOLUENE	23.91	738	731045	9.32	UG/L	99
40)	CHLOROBENZENE	25.10	777	732623	9.64	UG/L	99
41)	ETHYLBENZENE	27.41	853	418166	9.35	UG/L	99

* Compound is ISTD

:AL,,3 Move cursor; then press carriage return :

QUANT REPORT

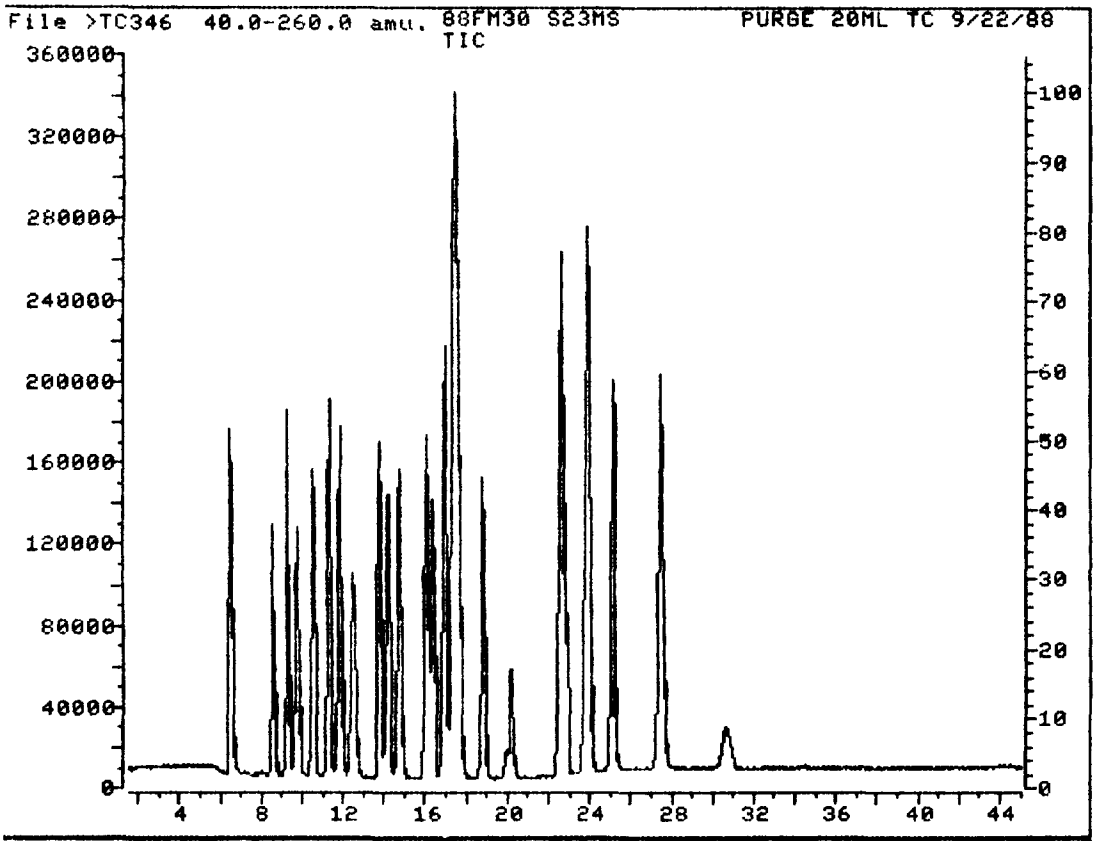
Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:27
Output File: ^TC347::QT Injected at: 880922 16:42
Data File: >TC347::A9 Dilution Factor: 1.00000
Name: 88FM30 S23MSD
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	147996	10.00	UG/L	69
5)	CHLOROETHANE	4.46	98	3842	.08	UG/L	92
6)	METHYLENE CHLORIDE	6.50	165	352254	9.00	UG/L	85
7)	ACROLEIN	7.38	194	515	.51	UG/L	77
8)	ACETONE	7.13	186	12161	3.93	UG/L	95
10)	CARBON DISULFIDE	8.08	217	13399	.08	UG/L	100
11)	1,1-DICHLOROETHENE	9.29	257	351593	8.62	UG/L	76
12)	1,1-DICHLOROETHANE	10.54	298	754240	8.63	UG/L	93
13)	1,2-DICHLOROETHENE (TOTAL)	11.27	322	368394	8.67	UG/L	80
14)	CHLOROFORM	11.85	341	661415	8.64	UG/L	99
15)	1,2-DICHLOROETHANE-D4	12.45	361	207323	9.66	UG/L	90
16)	1,2-DICHLOROETHANE	12.54	364	280542	9.73	UG/L	92
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.81	570	580947	10.00	UG/L	98
18)	2-BUTANONE	12.51	363	1492	1.40	UG/L	92
19)	1,1,1-TRICHLOROETHANE	13.79	405	529846	8.72	UG/L	98
20)	CARBON TETRACHLORIDE	14.19	418	441551	8.87	UG/L	97
22)	BROMODICHLOROMETHANE	14.73	436	534739	9.51	UG/L	96
23)	1,2-DICHLOROPROPANE	16.07	480	450786	9.36	UG/L	95
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	645479	13.20	UG/L	99
25)	TRICHLOROETHENE	16.92	508	362060	9.13	UG/L	99
26)	BENZENE-D6	17.29	520	1175083	9.85	UG/L	98
27)	BENZENE	17.44	525	1247017	9.01	UG/L	97
28)	DIBROMOCHLOROMETHANE	17.50	527	294274	10.00	UG/L	95
29)	TRANS-1,3-DICHLOROPROPENE	17.62	531	270432M	5.83	UG/L	
30)	1,1,2-TRICHLOROETHANE	17.62	531	195788	10.45	UG/L	99
31)	2-CHLOROETHYL VINYLETHER	18.72	567	142349	10.41	UG/L	96
32)	BROMOFORM	20.21	616	148867	10.69	UG/L	99
33)	*1,4-DICHLOROBUTANE (IS-3)	22.85	703	417403	10.00	UG/L	92
34)	4-METHYL-2-PENTANONE	20.30	619	1895	.10	UG/L	91
35)	2-HEXANONE	22.09	678	1046	.08	UG/L	56
36)	TETRACHLOROETHENE	22.61	695	284498	8.34	UG/L	98
37)	1,1,2,2-TETRACHLOROETHANE	22.55	693	265442	9.37	UG/L	99
38)	TOLUENE-D8	23.73	732	578592	9.18	UG/L	98
39)	TOLUENE	23.91	738	685965	8.56	UG/L	97
40)	CHLOROBENZENE	25.10	777	675988	8.71	UG/L	98
41)	ETHYLBENZENE	27.44	854	386263	8.46	UG/L	97

* Compound is ISTD

:AL,,3 Move cursor; then press carriage return :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PURGE 20ML TC 9/22/88
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200000
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120000
80000
40000
0
100
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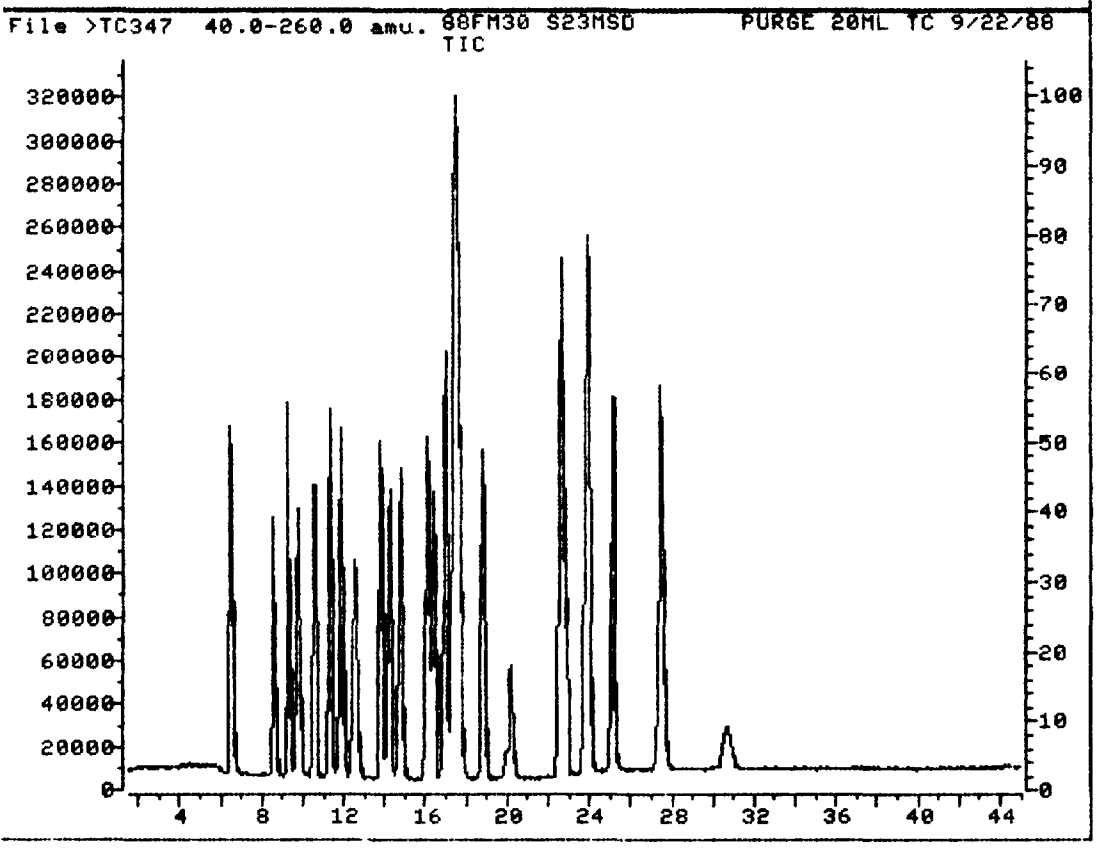
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TIC
PURGE 20ML TC 9/22/88
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200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
100
90
80
70
60
50
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30
20
10
0
4
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16
20
24
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32
36
40
44

:QREP,^TC340::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 15:59
Output File: ^TC340::QT Injected at: 880922 09:40
Data File: >TC340::A9 Dilution Factor: 1.00000
Name: MB
Misc: TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.69	270	86913	10.00	UG/L	65
2)	CHLOROMETHANE	1.76	9	621	.02	UG/L	88
6)	METHYLENE CHLORIDE	6.47	164	2794	.12	UG/L	87
8)	ACETONE	7.10	185	5536	3.04	UG/L	88
10)	CARBON DISULFIDE	8.02	215	17684	.18	UG/L	100
14)	CHLOROFORM	11.81	340	2402	.05	UG/L	81
15)	1,2-DICHLOROETHANE-D4	12.42	360	119623	9.49	UG/L	91
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.77	569	372800	10.00	UG/L	99
26)	BENZENE-D6	17.25	519	750439	9.81	UG/L	97
27)	BENZENE	17.22	518	6154	.07	UG/L	92
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	702	247708	10.00	UG/L	94
[illegible]	2-HEXANONE	22.33	686	935	.12	UG/L	75
38)	TOLUENE-D8	23.69	731	378721	10.13	UG/L	98
39)	TOLUENE	23.91	738	1340	.03	UG/L	75

* Compound is ISTD

MS data file header from : >TC340

Sample: MB Operator: CHACKO MS 9/22/88 9:40
Misc : TC 9/22/88 SF-5541
Sys. #: 3 MS model: 87 SW/HW rev.: IA ALS # : 0
Method file: AUTOCF Tuning file: MTCFVA 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

>TC340 MB TC 9/22/88 SF-5541
40.01 260.0 CLP ADC TIC
Upslope: .20 Area Reject: 53461. Max Peaks: 2 Bunching: 1
Onslope: 0.00 Results File ITC340 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	19.86	595	605	619	16240	270023	247358	83.14	45.396
2	30.59	944	958	972	12984	535355	297536	100.00	54.604

Sum of corrected areas: 544894.

Summary of Unknowns PBM Library Search and Quantitation

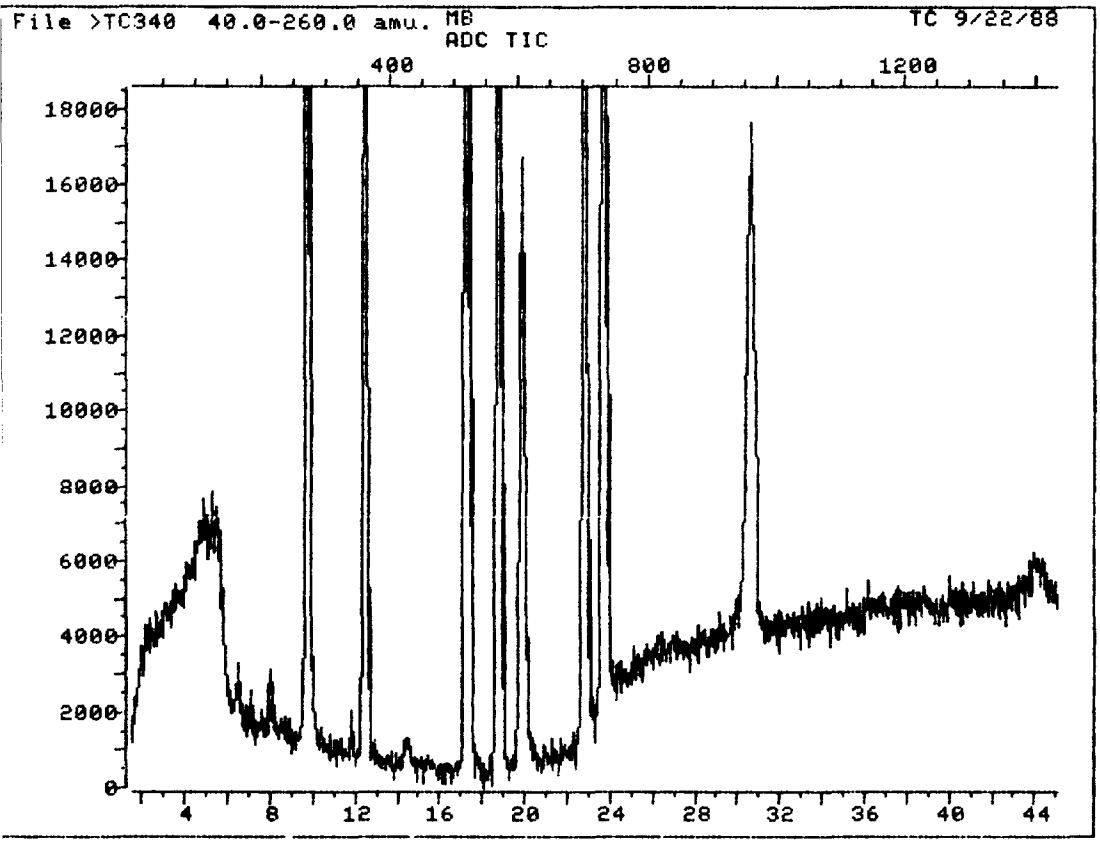
Standard	Concentration	Area	Retention Time	Unknown Window
1	10.0	825053.	9.69	1.51 - 14.23
2	10.0	931887.	18.77	14.23 - 20.79
3	10.0	534606.	22.81	20.79 - 45.06

Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 0.00 Amount Used (AU) = 0.00

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

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

9:28 AM FRI., 7 OCT., 1988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ADC TIC
TC 9/22/88
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800
1200
18000
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14000
12000
10000
8000
6000
4000
2000
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4
8
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16
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24
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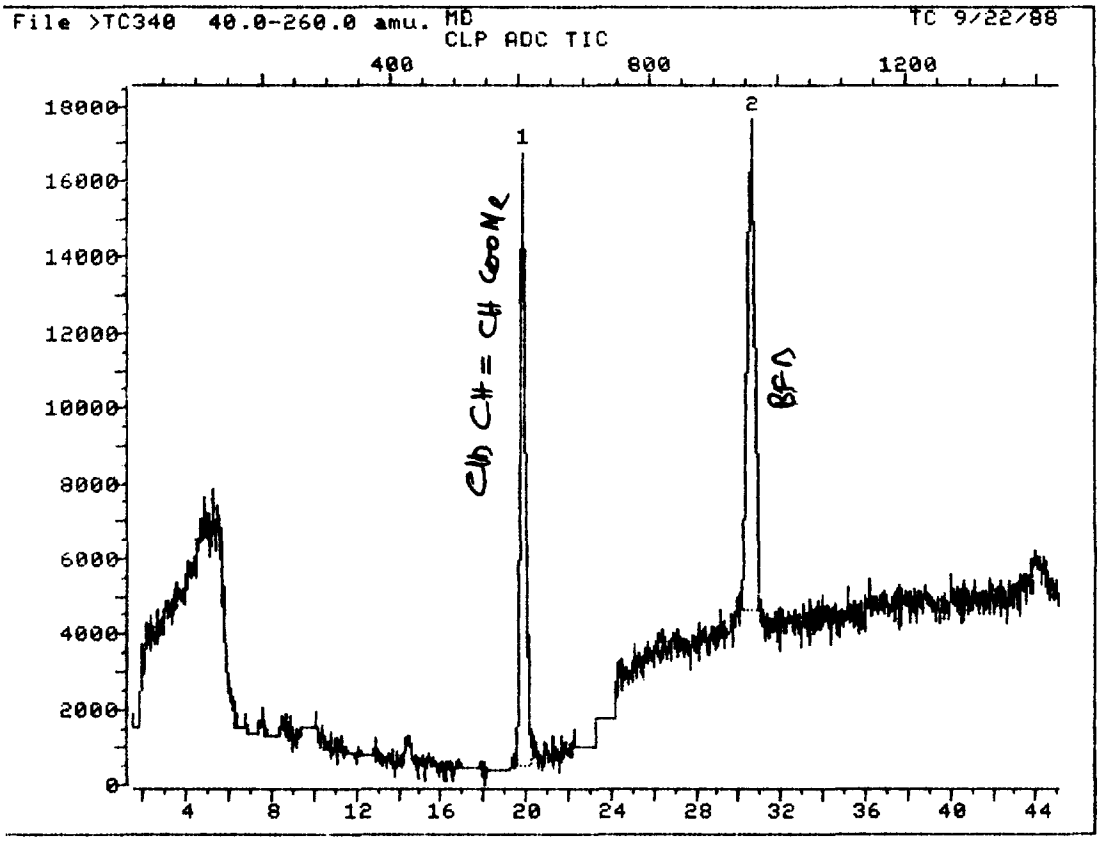
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CLP ADC TIC
TC 9/22/88
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2
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16000
14000
12000
10000
8000
6000
4000
2000
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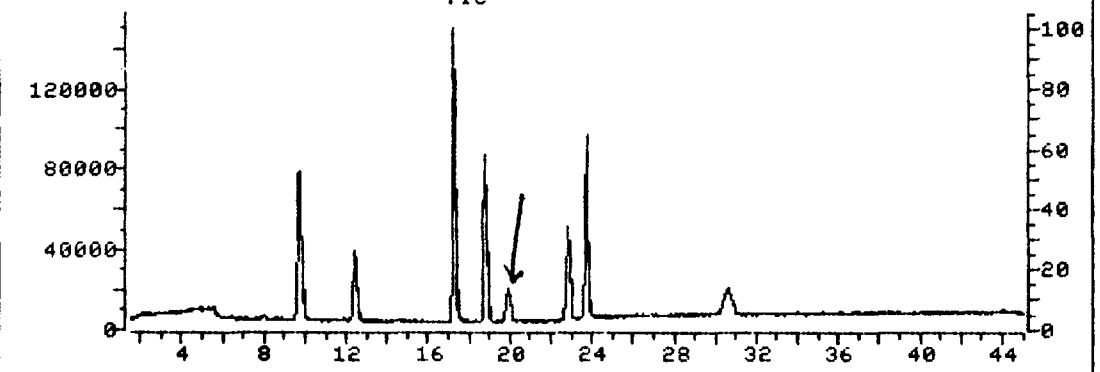
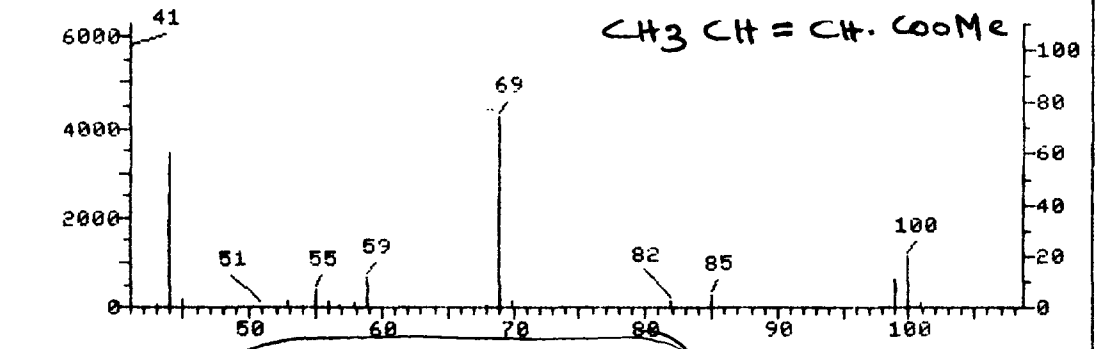
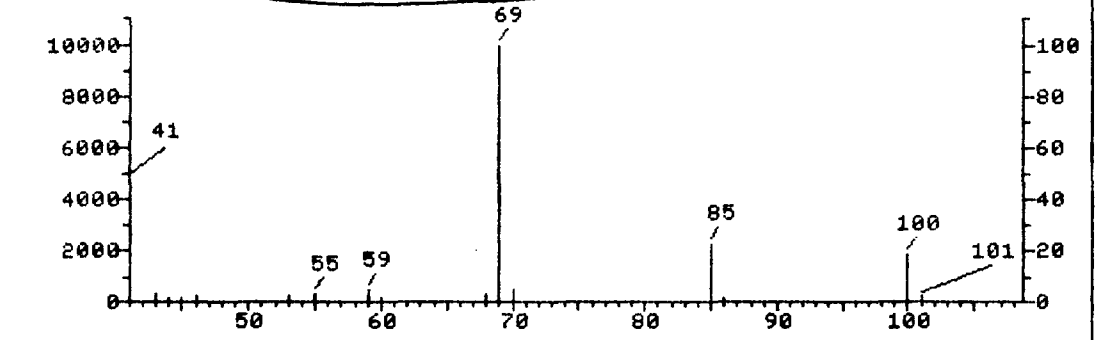
File >TC340 40.0-260.0 amu. MB TIC TC 9/22/88



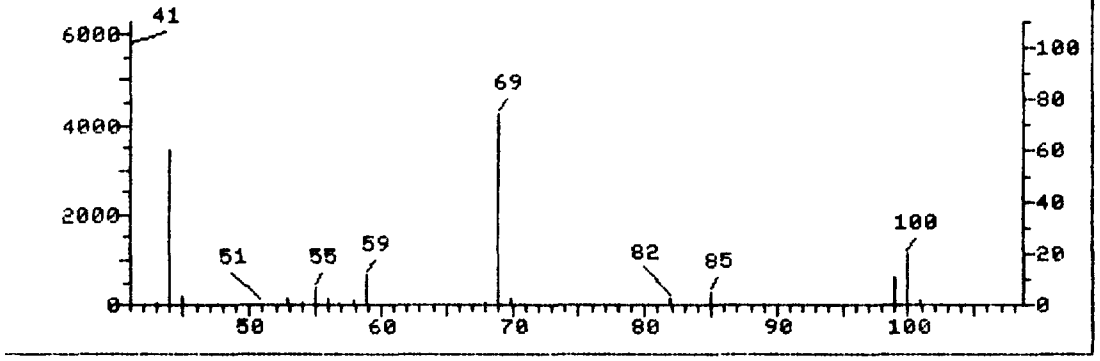
File >TC340 MB TC 9/22/88 SF-55 Scan 607
Bpk Ab 5729 19.93 min.

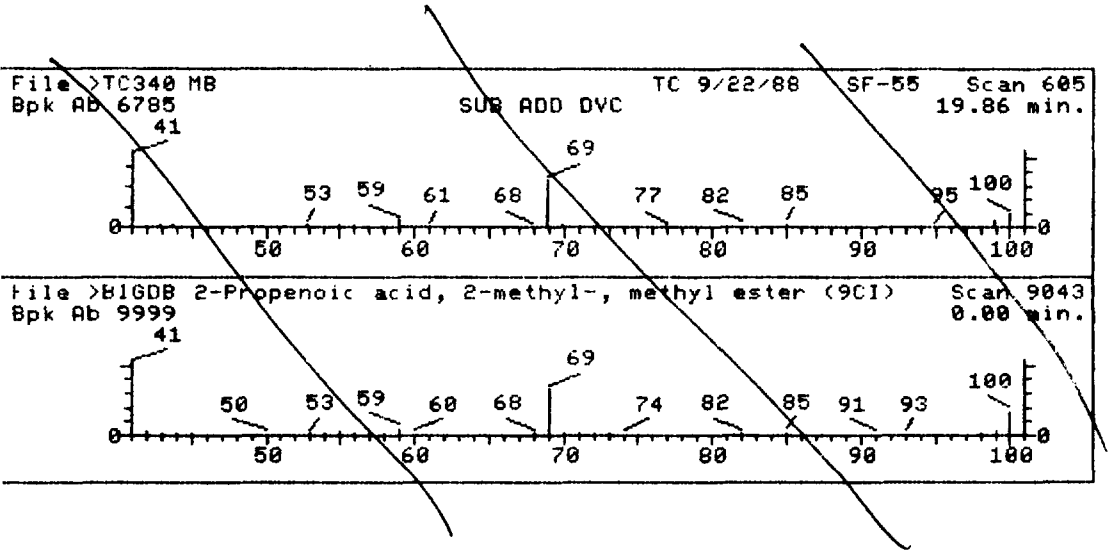


File >BIGDB 2-Butenoic acid, methyl ester, (E)- (9CI) Scan 9057
Bpk Ab 9999 0.00 min.



File >TC340 MB TC 9/22/88 SF-55 Scan 607
Bpk Ab 5729 19.93 min.





. Unknown #,1
Area = 247358.0 Tentative Concentration is 3.00

1. 2-~~Propenoic~~ acid, ~~2-methyl~~-, methyl ester (9CI) 100 C5H8O2
BUTENOIC

Sample file: >TC340 Spectrum #: 605
Search speed: 2 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	80626	9043	"BIGDB	21	68	2	0	54	42	8	13

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 15:48
Output File: ^TC341::QT Injected at: 880922 10:38
Data File: >TC341::A9 Dilution Factor: 1.00000
Name: VOA STD 15PPB
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.71	270	122907	10.00	UG/L	68
2)	CHLOROMETHANE	1.87	12	1026335	20.00	UG/L	97
3)	BROMOMETHANE	2.75	41	1273502	20.00	UG/L	96
4)	VINYL CHLORIDE	3.48	65	1465471	20.00	UG/L	97
5)	CHLOROETHANE	4.42	96	830135	20.00	UG/L	99
6)	METHYLENE CHLORIDE	6.49	164	487754	15.00	UG/L	82
7)	ACROLEIN	7.12	185	313922	375.00	UG/L	98
8)	ACETONE	7.09	184	964890	375.00	UG/L	89
9)	ACRYLONITRILE	7.76	206	1382718	375.00	UG/L	99
10)	CARBON DISULFIDE	7.94	212	1756250	12.50	UG/L	100
11)	1,1-DICHLOROETHENE	9.25	255	508050	15.00	UG/L	78
12)	1,1-DICHLOROETHANE	10.50	296	1088226	15.00	UG/L	94
13)	1,2-DICHLOROETHENE (TOTAL)	11.26	321	529464	15.00	UG/L	77
14)	CHLOROFORM	11.80	339	953776	15.00	UG/L	96
15)	1,2-DICHLOROETHANE-D4	12.41	359	178167	10.00	UG/L	88
16)	1,2-DICHLOROETHANE	12.53	363	359013	15.00	UG/L	94
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	569	501650	10.00	UG/L	99
18)	2-BUTANONE	12.44	360	115430	125.00	UG/L	90
19)	1,1,1-TRICHLOROETHANE	13.78	404	787143	15.00	UG/L	96
20)	CARBON TETRACHLORIDE	14.15	416	644889	15.00	UG/L	99
21)	VINYL ACETATE	14.39	424	322496	37.50	UG/L	90
22)	BROMODICHLOROMETHANE	14.72	435	728475	15.00	UG/L	98
23)	1,2-DICHLOROPROPANE	16.03	478	623961	15.00	UG/L	98
24)	CIS-1,3-DICHLOROPROPENE	16.30	487	886488	21.00	UG/L	97
25)	TRICHLOROETHENE	16.88	506	513420	15.00	UG/L	97
26)	BENZENE-D6	17.25	518	1029664	10.00	UG/L	97
27)	BENZENE	17.40	523	1792321	15.00	UG/L	98
28)	DIBROMOCHLOROMETHANE	17.49	526	381120	15.00	UG/L	98
29)	TRANS-1,3-DICHLOROPROPENE	17.61	530	357024M	8.91	UG/L	
30)	1,1,2-TRICHLOROETHANE	17.58	529	242641	15.00	UG/L	99
31)	2-CHLOROETHYL VINYLETHER	18.71	566	177198	15.00	UG/L	97
32)	BROMOFORM	20.17	614	180355	15.00	UG/L	97
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	701	330483	10.00	UG/L	95
34)	4-METHYL-2-PENTANONE	20.68	631	373697	25.00	UG/L	88
35)	2-HEXANONE	22.26	683	252933	25.00	UG/L	87
36)	TETRACHLOROETHENE	22.60	694	404906	15.00	UG/L	97
37)	1,1,2,2-TETRACHLOROETHANE	22.51	691	336560	15.00	UG/L	98
38)	TOLUENE-D8	23.72	731	498971	10.00	UG/L	98
39)	TOLUENE	23.90	737	951243	15.00	UG/L	99
40)	CHLOROBENZENE	25.09	776	922036	15.00	UG/L	98
41)	ETHYLBENZENE	27.40	852	542496	15.00	UG/L	96
42)	STYRENE	32.54	1021	958385	12.51	UG/L	81
43)	META XYLENE	32.97	1035	1762291	30.00	UG/L	91
44)	O-&/OR P-XYLENE	34.27	1078	2225588	37.60	UG/L	95

* Compound is ISTD

AL,,3 Move cursor; then press carriage return :

:QREP,^TC342::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:01
Output File: ^TC342::QT Injected at: 880922 11:36
Data File: >TC342::A9 Dilution Factor: 1.00000
Name: 88FM30 S24
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.69	270	144993	10.00	UG/L	70
6)	METHYLENE CHLORIDE	6.53	166	7195	.19	UG/L	81
7)	ACROLEIN	7.26	190	6949	7.04	UG/L	95
8)	ACETONE	7.13	186	62985	20.75	UG/L	89
9)	ACRYLONITRILE	7.86	210	43539	10.01	UG/L	98
10)	CARBON DISULFIDE	8.02	215	13503	.08	UG/L	100
12)	1,1-DICHLOROETHANE	10.51	297	1567	.02	UG/L	84
14)	CHLOROFORM	11.81	340	6617	.09	UG/L	98
15)	1,2-DICHLOROETHANE-D4	12.42	360	187746	8.93	UG/L	89
16)	1,2-DICHLOROETHANE	12.57	365	8255	.29	UG/L	66
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	570	582275	10.00	UG/L	99
[illegible]	2-BUTANONE	12.48	362	5033	4.70	UG/L	87
19)	1,1,1-TRICHLOROETHANE	13.79	405	4379	.07	UG/L	96
22)	BROMODICHLOROMETHANE	14.73	436	6706	.12	UG/L	86
23)	1,2-DICHLOROPROPANE	16.07	480	5458	.11	UG/L	91
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	6837	.14	UG/L	89
25)	TRICHLOROETHENE	16.92	508	2109	.05	UG/L	96
26)	BENZENE-D6	17.25	519	1160743	9.71	UG/L	97
27)	BENZENE	17.31	521	14734	.11	UG/L	98
28)	DIBROMOCHLOROMETHANE	17.50	527	5010	.17	UG/L	86
29)	TRANS-1,3-DICHLOROPROPENE	17.59	530	4229	.09	UG/L	81
30)	1,1,2-TRICHLOROETHANE	17.62	531	6226	.33	UG/L	88
31)	2-CHLOROETHYL VINYLETHER	18.80	570	9089	.66	UG/L	60
32)	BROMOFORM	20.20	616	1327	.10	UG/L	85
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	702	403724	10.00	UG/L	93
34)	4-METHYL-2-PENTANONE	21.14	647	1746	.10	UG/L	83
35)	2-HEXANONE	22.24	683	13166	1.07	UG/L	94
36)	TETRACHLOROETHENE	22.57	694	507	.02	UG/L	81
37)	1,1,2,2-TETRACHLOROETHANE	22.54	693	10637	.39	UG/L	96
38)	TOLUENE-D8	23.73	732	581703	9.54	UG/L	99
39)	TOLUENE	23.91	738	6577	.08	UG/L	94
40)	CHLOROBENZENE	25.12	778	6478	.09	UG/L	88
41)	ETHYLBENZENE	27.34	851	569	.01	UG/L	96
42)	STYRENE	32.60	1024	7766	.08	UG/L	80
43)	META XYLENE	32.97	1036	3520	.05	UG/L	86

* Compound is ISTD

:QREP,^TC343::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:03
Output File: ^TC343::QT Injected at: 880922 12:34
Data File: >TC343::A9 Dilution Factor: 1.00000
Name: 88FM30 S25
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	143427	10.00	UG/L	68
6)	METHYLENE CHLORIDE	6.47	164	4829	.13	UG/L	90
7)	ACROLEIN	7.32	192	1602	1.64	UG/L	61
8)	ACETONE	7.13	186	25033	8.34	UG/L	93
10)	CARBON DISULFIDE	8.05	216	19582	.12	UG/L	100
14)	CHLOROFORM	11.81	340	3020	.04	UG/L	87
15)	1,2-DICHLOROETHANE-D4	12.45	361	182874	8.80	UG/L	85
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	570	568003	10.00	UG/L	98
18)	2-BUTANONE	12.45	361	824	.79	UG/L	99
19)	1,1,1-TRICHLOROETHANE	13.76	404	568	.01	UG/L	91
24)	CIS-1,3-DICHLOROPROPENE	16.37	490	590	.01	UG/L	60
[illegible]	BENZENE-D6	17.25	519	1121257	9.62	UG/L	98
27)	BENZENE	17.25	519	9492	.07	UG/L	98
31)	2-CHLOROETHYL VINYLETHER	18.80	570	8472	.63	UG/L	60
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	702	400237	10.00	UG/L	94
35)	2-HEXANONE	21.87	671	1429	.12	UG/L	69
38)	TOLUENE-D8	23.72	732	561908	9.30	UG/L	98
39)	TOLUENE	23.91	738	3856	.05	UG/L	85

* Compound is ISTD

QUANT REPORT

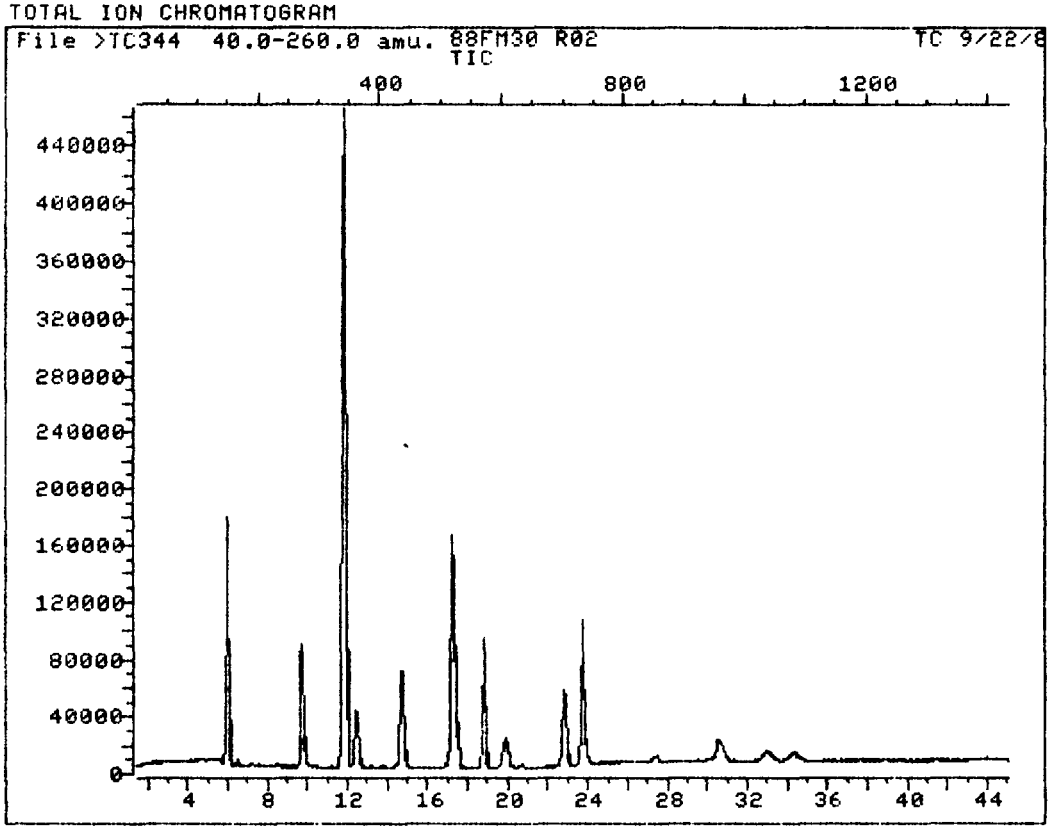
Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:08
Output File: ^TC344::QT Injected at: 880922 13:47
Data File: >TC344::A9 Dilution Factor: 1.00000
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	104059	10.00	UG/L	66
6)	METHYLENE CHLORIDE	6.50	165	10320	.37	UG/L	83
7)	ACROLEIN	7.29	191	10500	14.81	UG/L	79
8)	ACETONE	7.13	186	14897	6.84	UG/L	73
10)	CARBON DISULFIDE	8.01	215	11943	.10	UG/L	100
14)	CHLOROFORM	11.81	340	1877471	34.88	UG/L	99
15)	1,2-DICHLOROETHANE-D4	12.42	360	136003	9.02	UG/L	89
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	570	406003	10.00	UG/L	99
18)	2-BUTANONE	12.42	360	873	1.17	UG/L	98
19)	1,1,1-TRICHLOROETHANE	13.76	404	3216	.08	UG/L	94
22)	BROMODICHLOROMETHANE	14.73	436	258694	6.58	UG/L	99
24)	CIS-1,3-DICHLOROPROPENE	15.95	476	508	.01	UG/L	71
25)	TRICHLOROETHENE	16.89	507	5268	.19	UG/L	95
26)	BENZENE-D6	17.25	519	824906	9.90	UG/L	97
27)	BENZENE	17.28	520	9273	.10	UG/L	95
28)	DIBROMOCHLOROMETHANE	17.50	527	53911	2.62	UG/L	91
29)	TRANS-1,3-DICHLOROPROPENE	17.59	530	689	.02	UG/L	87
30)	1,1,2-TRICHLOROETHANE	17.62	531	527	.04	UG/L	91
31)	2-CHLOROETHYL VINYLETHER	18.80	570	6375	.67	UG/L	67
32)	BROMOFORM	20.17	615	2875	.30	UG/L	94
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	702	281731	10.00	UG/L	94
34)	4-METHYL-2-PENTANONE	20.69	632	19126	1.50	UG/L	89
38)	TOLUENE-D8	23.72	732	416356	9.79	UG/L	98
39)	TOLUENE	23.88	737	22742	.42	UG/L	82
41)	ETHYLBENZENE	27.40	853	5457	.18	UG/L	97
42)	STYRENE	32.63	1025	647	.01	UG/L	75
43)	META XYLENE	33.06	1039	36344	.73	UG/L	96
44)	O-&/OR P-XYLENE	34.30	1080	14869	.29	UG/L	97

* Compound is ISTD

TOTAL ION CHROMATOGRAM



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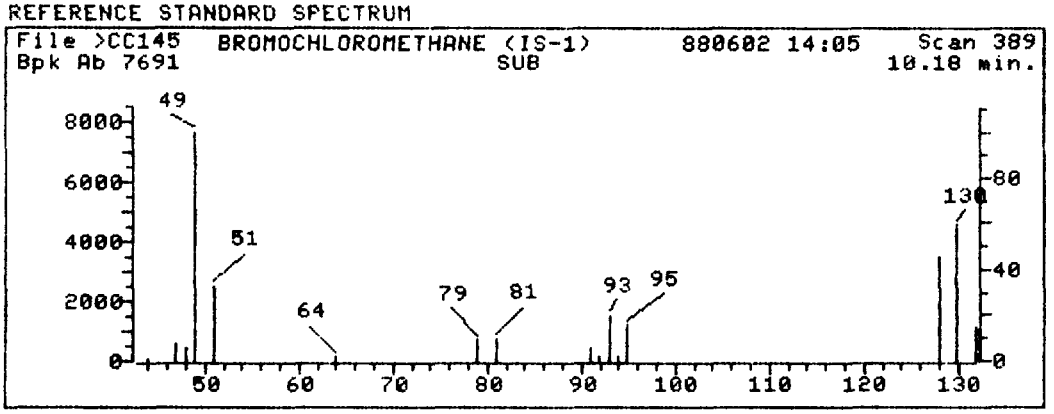
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541

Id File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

Operator ID: CHACKO
Quant Time: 880928 16:08
Injected at: 880922 13:47

REFERENCE STANDARD SPECTRUM



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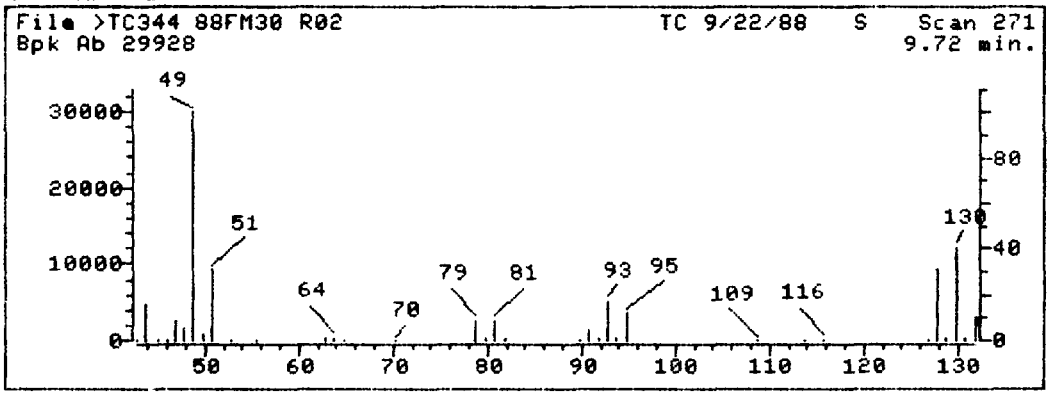

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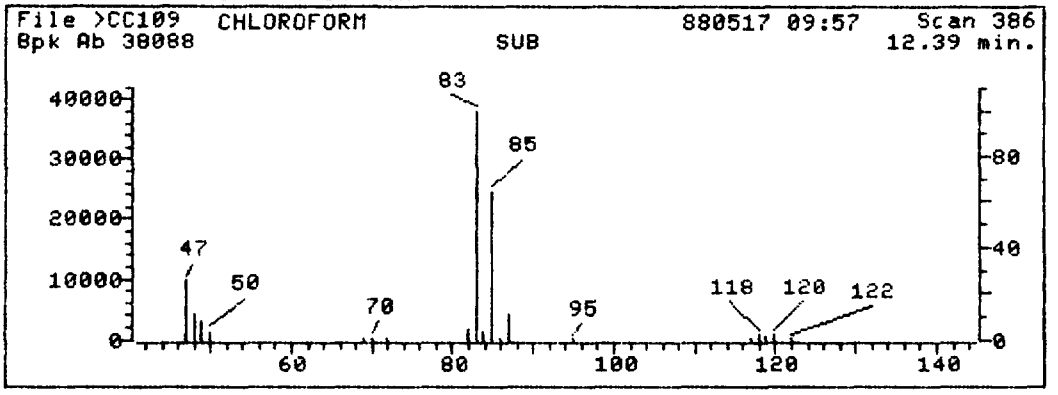
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 1 (ISTD)
Compound Name: BROMOCHLOROMETHANE (IS-1)
Scan Number: 271
Retention Time: 9.72 min.
Quant Ion: 128.0
Area: 104059
Concentration: 10.00 UG/L
q-value: 66

REFERENCE STANDARD SPECTRUM



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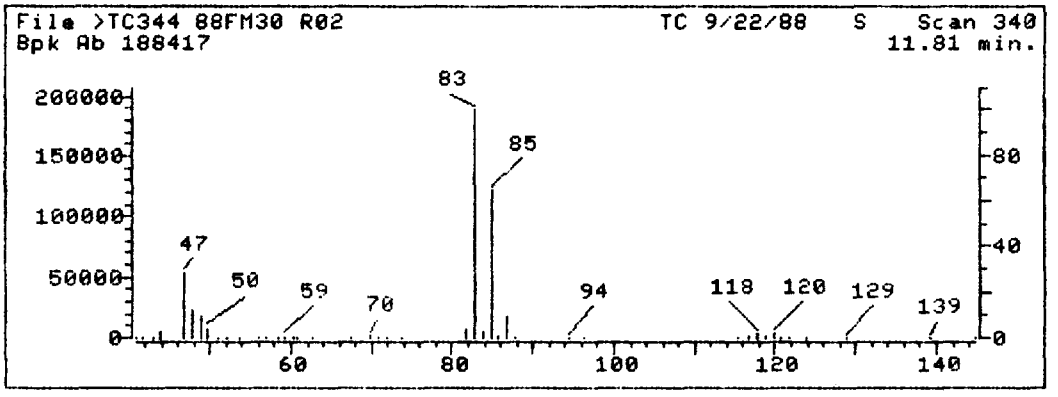

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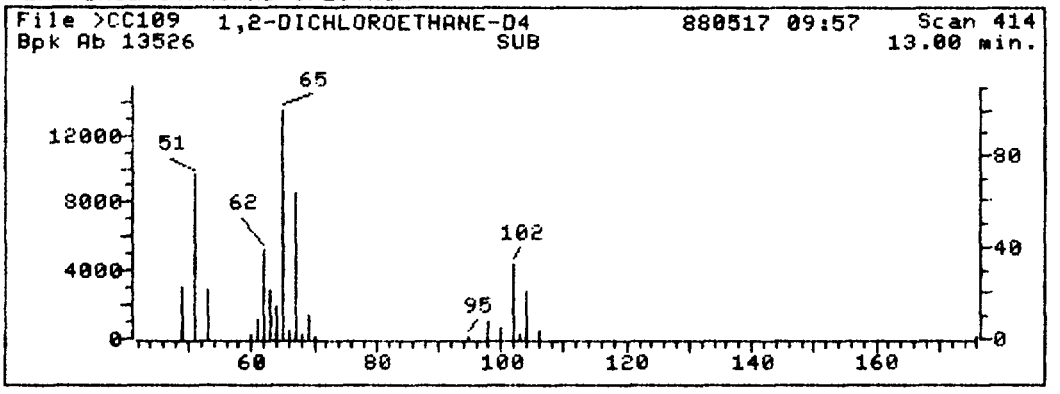
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 14
Compound Name: CHLOROFORM
Scan Number: 340
Retention Time: 11.81 min.
Quant Ion: 83.0
Area: 1877471
Concentration: 34.88 UG/L
q-value: 99

REFERENCE STANDARD SPECTRUM



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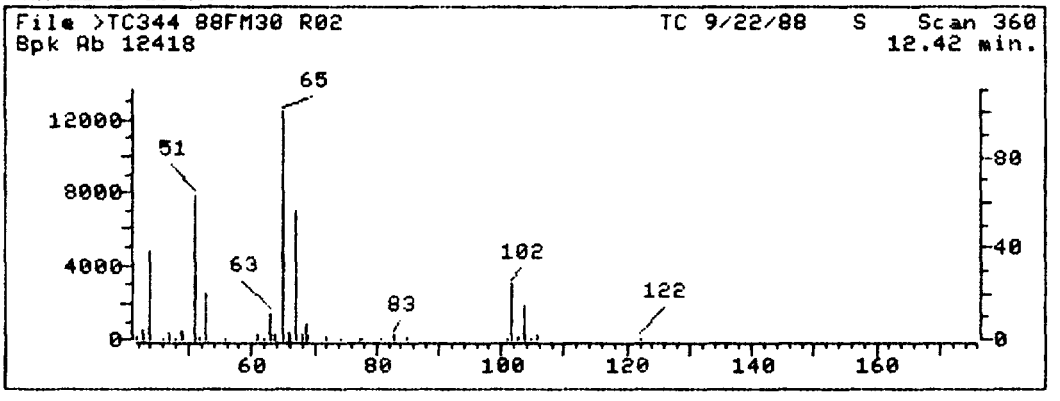

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Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 15
Compound Name: 1,2-DICHLOROETHANE-D4
Scan Number: 360
Retention Time: 12.42 min.
Quant Ion: 65.0
Area: 136003
Concentration: 9.02 UG/L
q-value: 89

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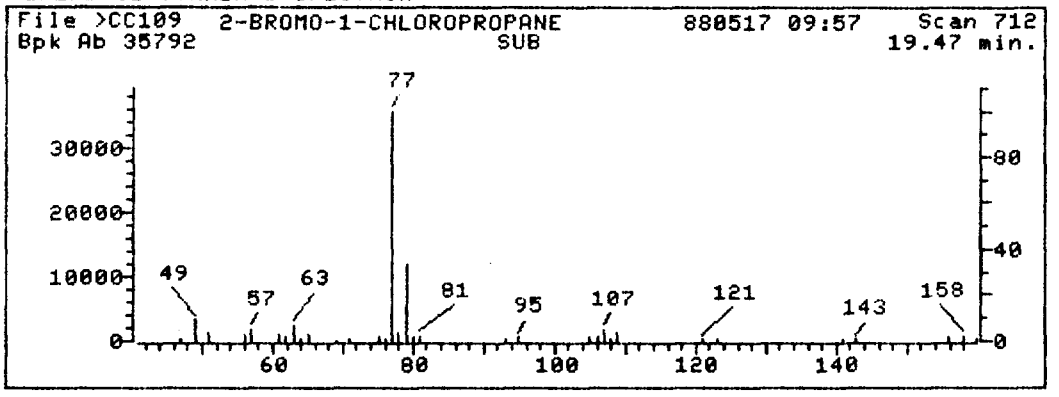

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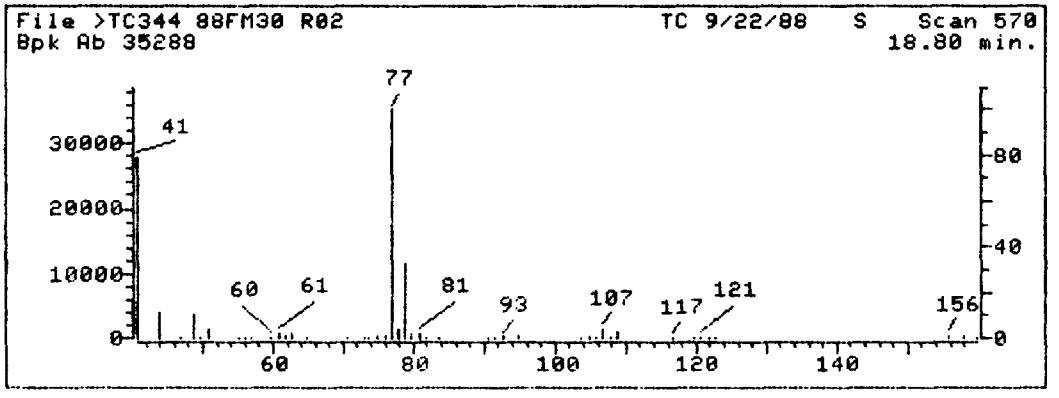

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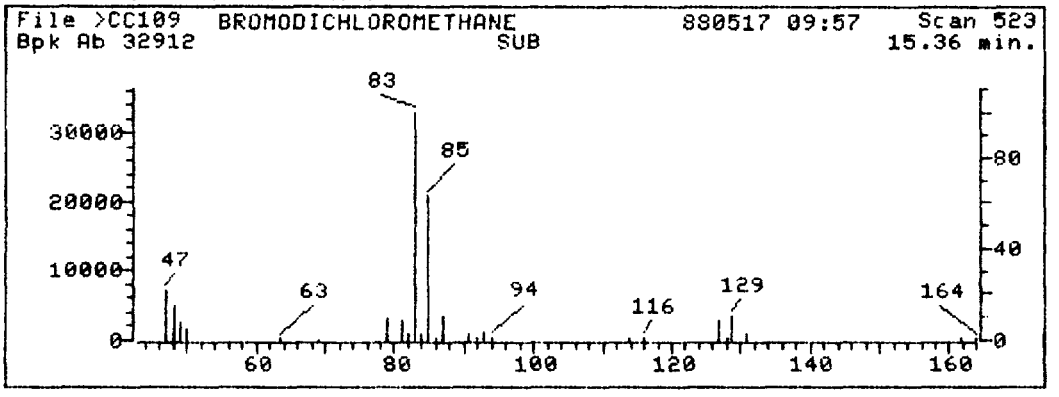
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 17 (ISTD)
Compound Name: 2-BROMO-1-CHLOROPROPANE (IS-2)
Scan Number: 570
Retention Time: 18.80 min.
Quant Ion: 77.0
Area: 406003
Concentration: 10.00 UG/L
q-value: 99

REFERENCE STANDARD SPECTRUM



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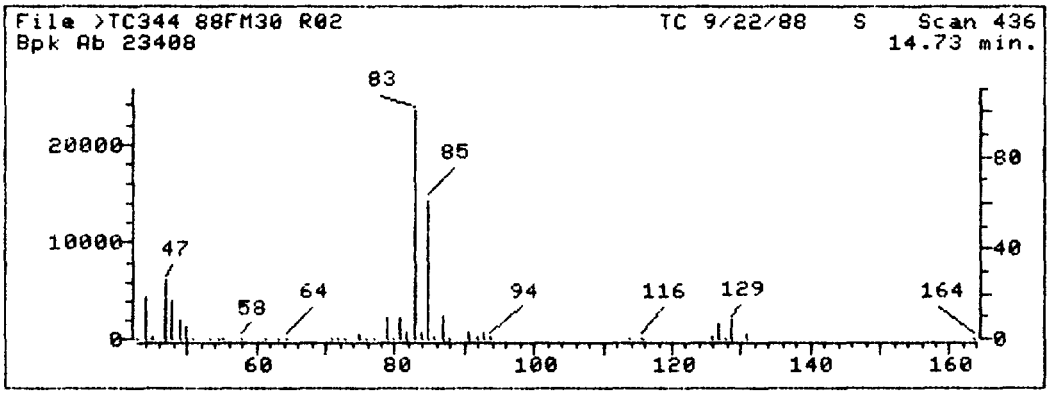

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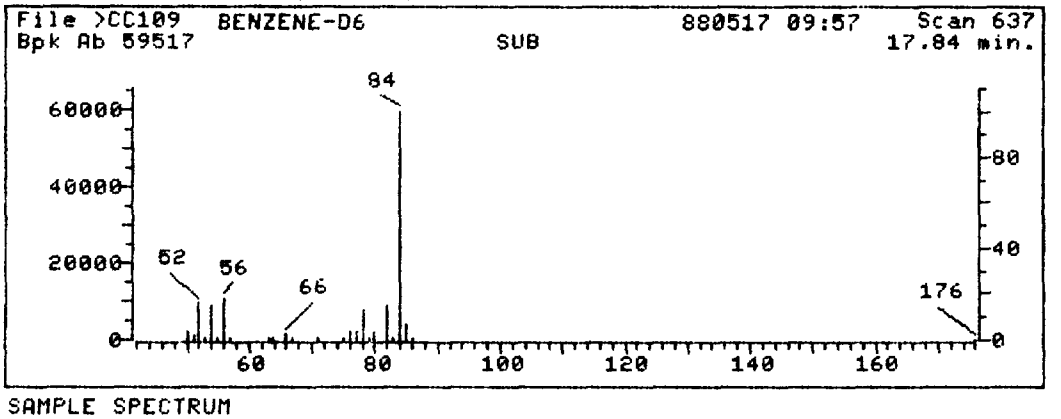
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 22
Compound Name: BROMODICHLOROMETHANE
Scan Number: 436
Retention Time: 14.73 min.
Quant Ion: 83.0
Area: 258694
Concentration: 6.58 UG/L
q-value: 99

REFERENCE STANDARD SPECTRUM



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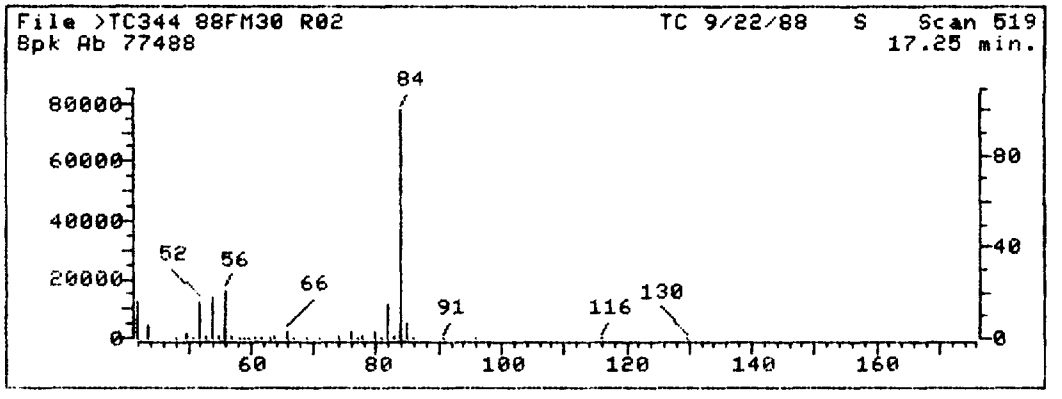

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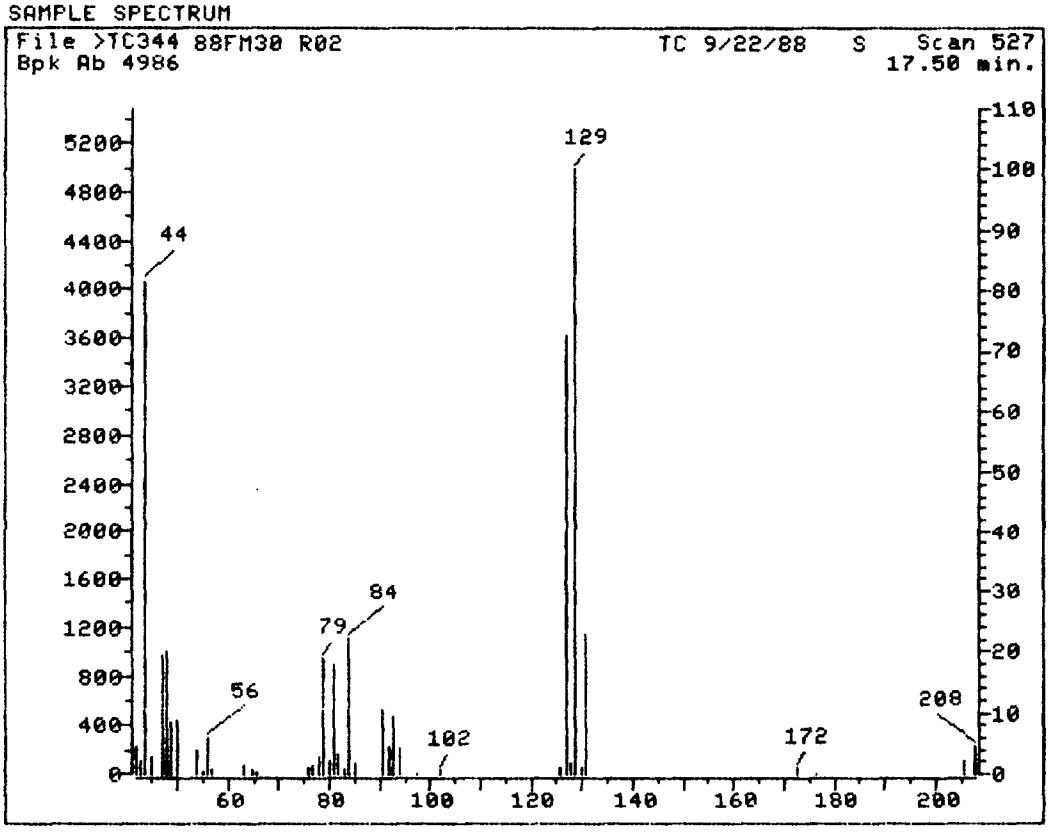
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 26
Compound Name: BENZENE-D6
Scan Number: 519
Retention Time: 17.25 min.
Quant Ion: 84.0
Area: 824906
Concentration: 9.90 UG/L
q-value: 97

SAMPLE SPECTRUM



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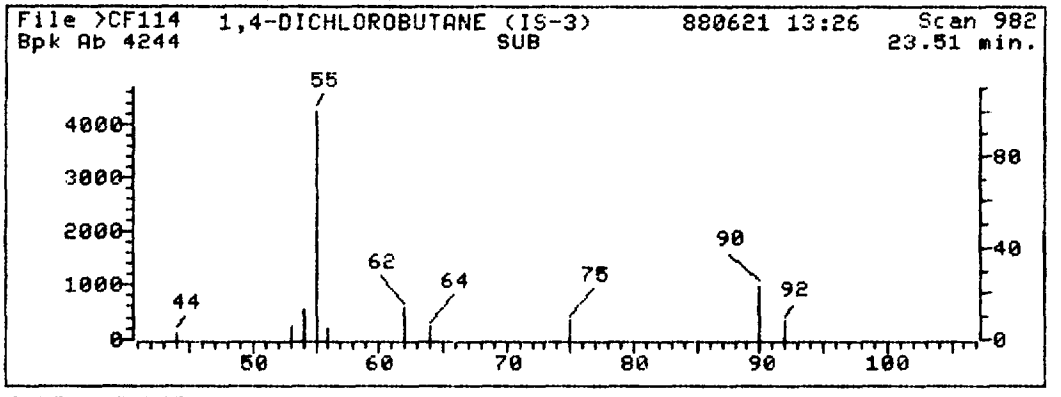
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 28
Compound Name: DIBROMOCHLOROMETHANE
Scan Number: 527
Retention Time: 17.50 min.
Quant Ion: 129.0
Area: 53911
Concentration: 2.62 UG/L
q-value: 91

REFERENCE STANDARD SPECTRUM



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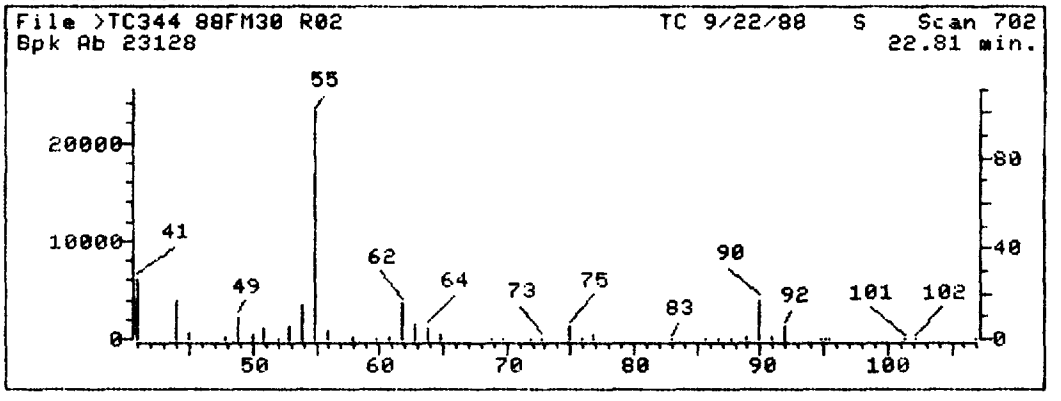

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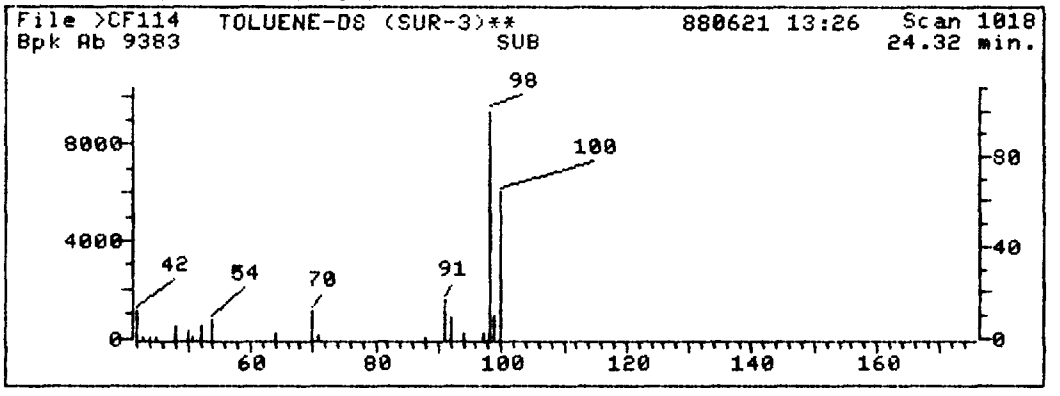
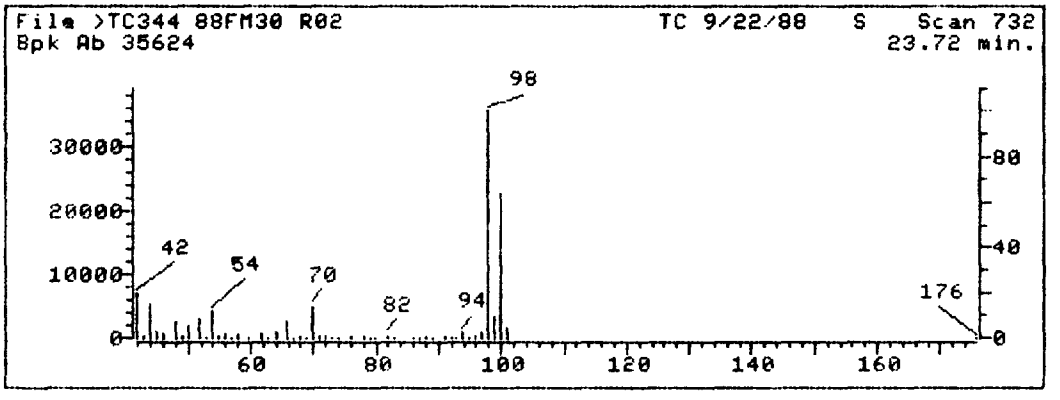
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 33 (ISTD)
Compound Name: 1,4-DICHLOROBUTANE (IS-3)
Scan Number: 702
Retention Time: 22.81 min.
Quant Ion: 55.0
Area: 281731
Concentration: 10.00 UG/L
q-value: 94

REFERENCE STANDARD SPECTRUM



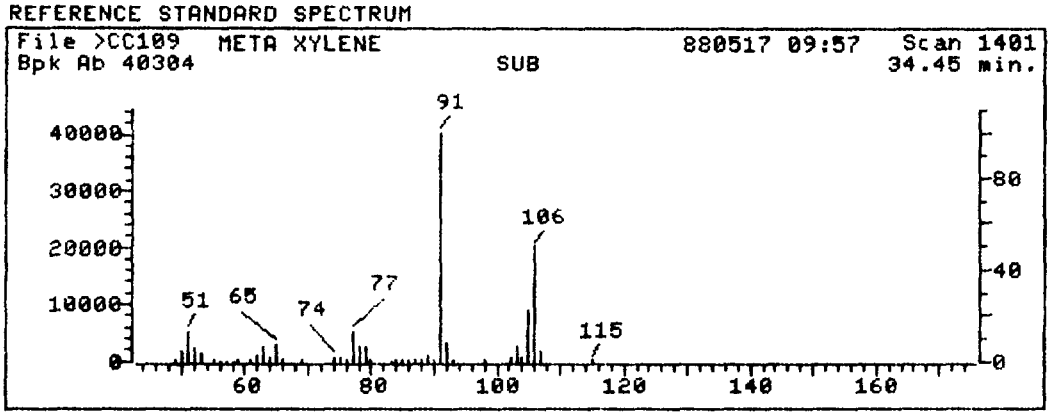
SAMPLE SPECTRUM



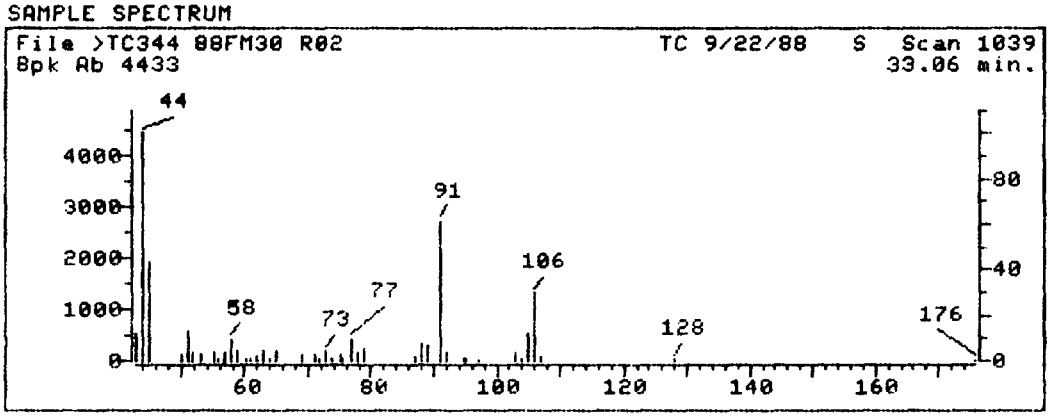
Data File: >TC344::A9 Quant Output File: ^TC344::QT
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 38
Compound Name: TOLUENE-D8
Scan Number: 732
Retention Time: 23.72 min.
Quant Ion: 98.0
Area: 416356
Concentration: 9.79 UG/L
q-value: 98

REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM



Data File: >TC344::A9 Quant Output File: ^TC344::QT
Name: 88FM30 R02
Misc: TC 9/22/88 SF-5541
Quant Time: 880928 16:08 Quant ID File: VOATC::A0
Injected at: 880922 13:47 Last Calibration: 880928 15:47

Compound No: 43
Compound Name: META XYLENE
Scan Number: 1039
Retention Time: 33.06 min.
Quant Ion: 106.0
Area: 36344
Concentration: .73 UG/L
q-value: 96

MS data file header from : >TC344

Sample: 88FM30 R02 Operator: CHACKO MS 9/22/88 13:47
Misc : TC 9/22/88 SF-5541
Sys. #: 3 MS model: 87 SW/HW rev.: IA ALS # : 0
Method file: AUTOCF Tuning file: MTCFVA 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

>TC344 88FM30 R02 TC 9/22/88 SF-5541
40.01 260.0 CLP ADC TIC
Upslope: .20 Area Reject: 60902. Max Peaks: 4 Bunching: 1
Dnslope: 0.00 Results File ITC344 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	5.98	139	148	156	173258	1927866	1862163	100.00	71.679
2	19.87	593	605	609	20032	304507	282305	15.16	10.867
3	30.63	947	959	980	14379	694802	373921	20.08	14.393
4	34.33	1080	1081	1096	5608	240541	79516	4.27	3.061

Sum of corrected areas: 2597905.

Summary of Unknowns PBM Library Search and Quantitation

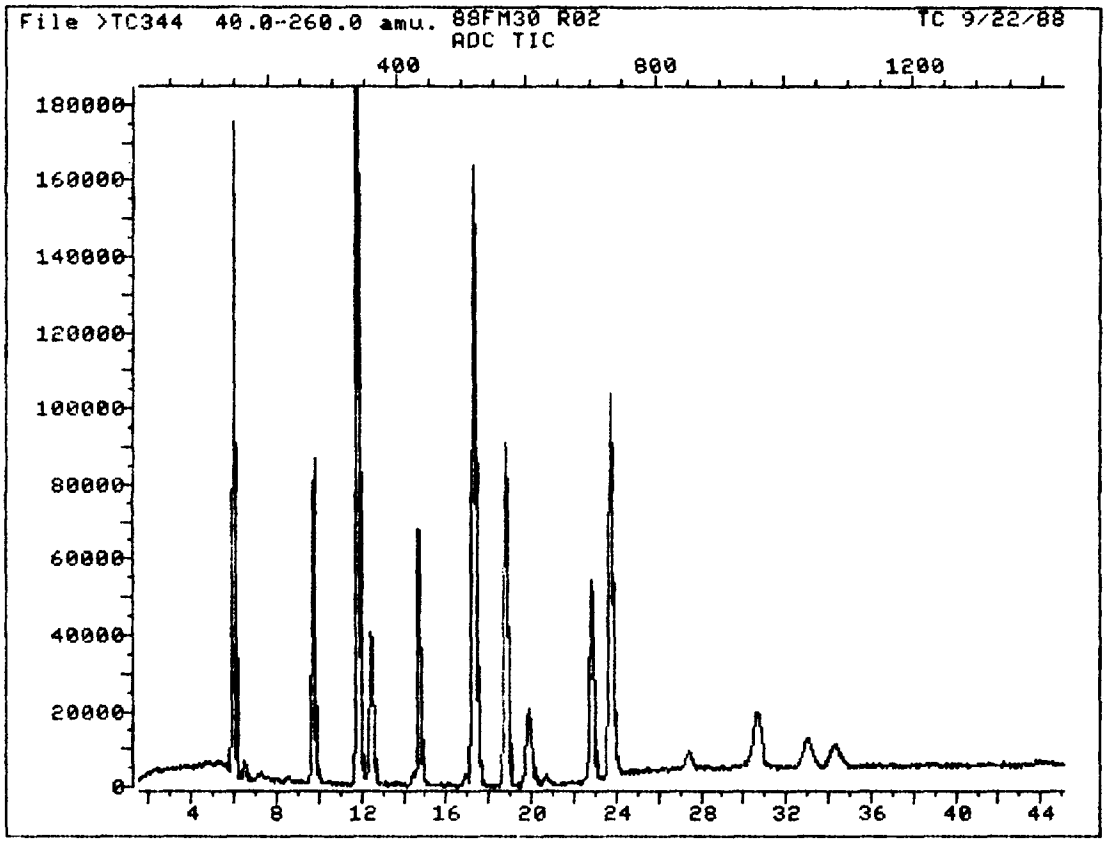
Standard	Concentration	Area	Retention Time	Unknown Window
1	10.0	943001.	9.72	1.51 - 14.26
2	10.0	1019864.	18.80	14.26 - 20.81
3	10.0	609023.	22.81	20.81 - 45.06

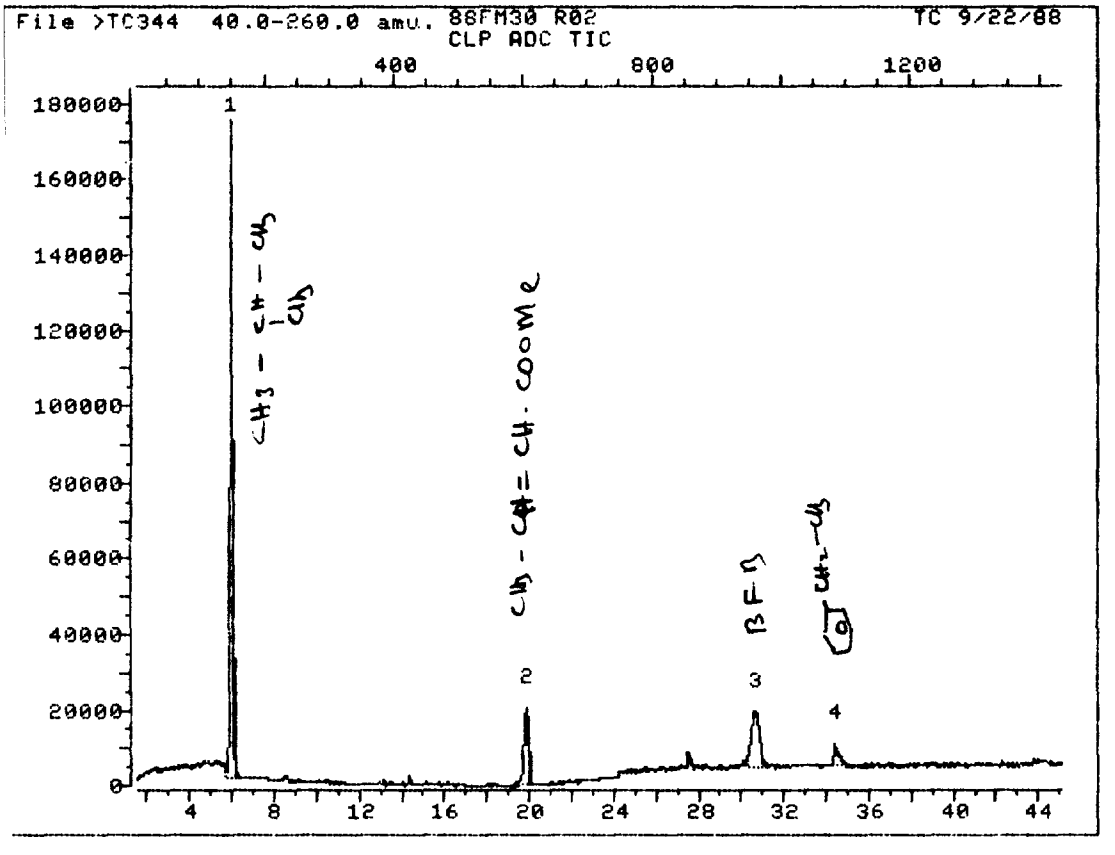
Dilution Factor (DF) = 1.00 Fractional Solids (FS) = 1.00
Amount Method (AM) = 0.00 Amount Used (AU) = 0.00

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

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

9:59 AM FRI., 7 OCT., 1988


File >TC344 40.0-260.0 amu. 88FM30 R02
ADC TIC
TC 9/22/88
400
800
1200
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
4
8
12
16
20
24
28
32
36
40
44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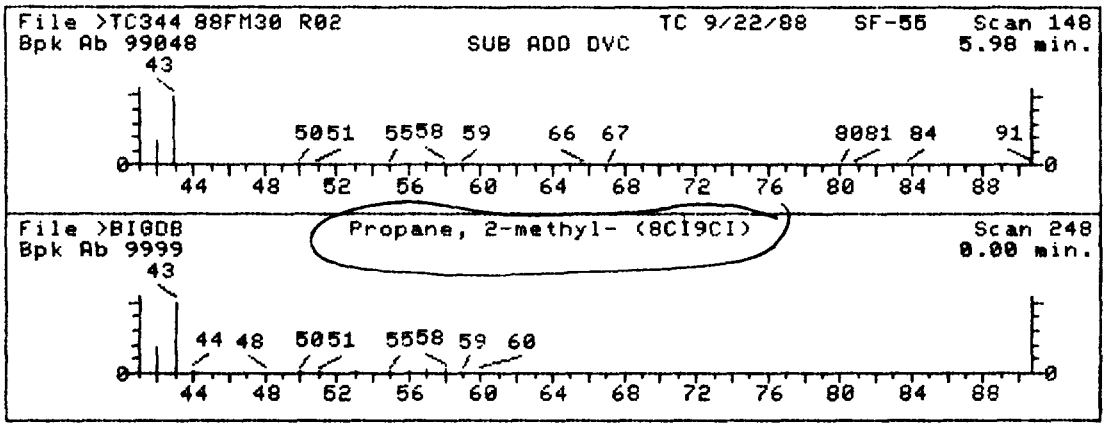
CLP ADC TIC
TC 9/22/88
400
800
1200
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
1
2
3
4
4
8
12
16
20
24
28
32
36
40
44

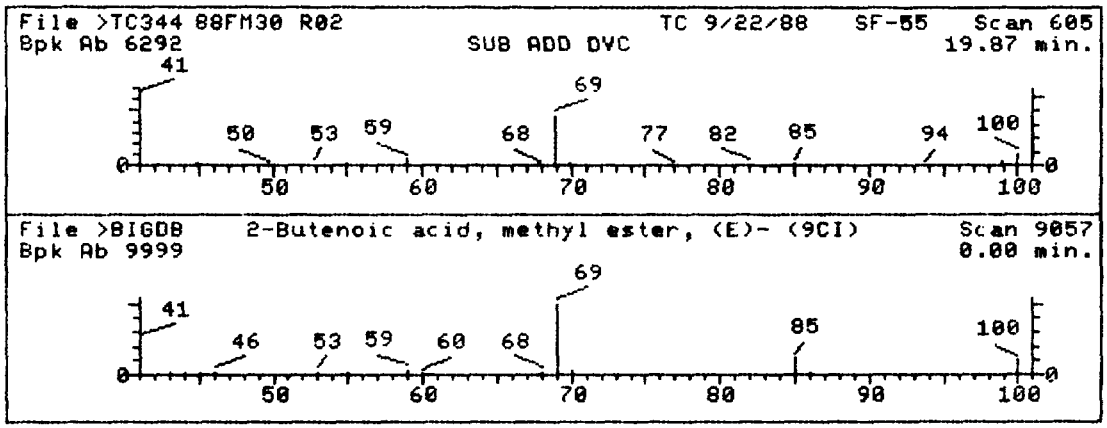


. Unknown #,1
Area = 1862163. Tentative Concentration is 20.00

1. Propane, 2-methyl- (8CI9CI) 58 C4H10

Sample file: >TC344 Spectrum #: 148
Search speed: 2 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	70*	75285	248	"BIGDB	27	42	1	0	83	7	42	15



. Unknown #,2
Area = 282305.0 Tentative Concentration is 3.00

1. 2-Butenoic acid, methyl ester, (E)- (9CI) 100 C5H8O2

Sample file: >TC344 Spectrum #: 605
Search speed: 2 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42*	623438	9057	"BIGDB	21	67	2	0	72	21	17	13

:QREP,^TC345::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:13
Output File: ^TC345::QT Injected at: 880922 14:45
Data File: >TC345::A9 Dilution Factor: 1.00000
Name: 88FM30 S23
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	136690	10.00	UG/L	66
3)	BROMOMETHANE	2.79	43	3536	.05	UG/L	74
6)	METHYLENE CHLORIDE	6.50	165	10857	.30	UG/L	89
8)	ACETONE	7.13	186	14270	4.99	UG/L	86
9)	ACRYLONITRILE	7.86	210	15601	3.80	UG/L	88
10)	CARBON DISULFIDE	8.05	216	8267	.05	UG/L	100
12)	1,1-DICHLOROETHANE	10.51	297	3777	.05	UG/L	96
13)	1,2-DICHLOROETHENE (TOTAL)	11.33	324	656	.02	UG/L	70
14)	CHLOROFORM	11.84	341	10050	.14	UG/L	87
15)	1,2-DICHLOROETHANE-D4	12.45	361	180379	9.10	UG/L	86
16)	1,2-DICHLOROETHANE	12.54	364	9499	.36	UG/L	79
	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	570	548180	10.00	UG/L	98
19)	1,1,1-TRICHLOROETHANE	13.76	404	1839	.03	UG/L	91
22)	BROMODICHLOROMETHANE	14.70	435	11568	.22	UG/L	98
23)	1,2-DICHLOROPROPANE	16.04	479	6338	.14	UG/L	92
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	14791	.32	UG/L	99
26)	BENZENE-D6	17.28	520	1108901	9.86	UG/L	97
27)	BENZENE	17.28	520	6565	.05	UG/L	93
28)	DIBROMOCHLOROMETHANE	17.49	527	9362	.34	UG/L	97
29)	TRANS-1,3-DICHLOROPROPENE	17.65	532	7881	.18	UG/L	86
30)	1,1,2-TRICHLOROETHANE	17.62	531	6098	.34	UG/L	92
31)	2-CHLOROETHYL VINYLETHER	18.77	569	12546	.97	UG/L	67
32)	BROMOFORM	20.20	616	4865	.37	UG/L	97
33)	*1,4-DICHLOROBUTANE (IS-3)	22.81	702	374491	10.00	UG/L	94
35)	2-HEXANONE	21.84	670	1600	.14	UG/L	95
37)	1,1,2,2-TETRACHLOROETHANE	22.54	693	9126	.36	UG/L	90
38)	TOLUENE-D8	23.72	732	560242	9.91	UG/L	99
39)	TOLUENE	23.91	738	6642	.09	UG/L	99
40)	CHLOROBENZENE	25.12	778	6168	.09	UG/L	93
41)	ETHYLBENZENE	27.43	854	1450	.04	UG/L	71
42)	STYRENE	32.97	1036	561	.01	UG/L	89
43)	META XYLENE	33.06	1039	3042	.05	UG/L	72
44)	O-&/OR P-XYLENE	34.36	1082	8055	.12	UG/L	83

* Compound is ISTD

:QREP,^TC346::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:19
Output File: ^TC346::QT Injected at: 880922 15:43
Data File: >TC346::A9 Dilution Factor: 1.00000
Name: 88FM30 S23MS
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	145618	10.00	UG/L	69
5)	CHLOROETHANE	4.49	99	3685	.07	UG/L	91
6)	METHYLENE CHLORIDE	6.50	165	369508	9.59	UG/L	83
8)	ACETONE	7.17	187	8841	2.90	UG/L	75
10)	CARBON DISULFIDE	8.02	215	12704	.08	UG/L	100
11)	1,1-DICHLOROETHENE	9.26	256	372448	9.28	UG/L	80
12)	1,1-DICHLOROETHANE	10.51	297	823565	9.58	UG/L	95
13)	1,2-DICHLOROETHENE (TOTAL)	11.27	322	392920	9.40	UG/L	81
14)	CHLOROFORM	11.85	341	720338	9.56	UG/L	99
15)	1,2-DICHLOROETHANE-D4	12.45	361	202823	9.61	UG/L	90
16)	1,2-DICHLOROETHANE	12.55	364	279996	9.87	UG/L	92
[illegible]	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.81	570	578970	10.00	UG/L	99
18)	2-BUTANONE	12.45	361	1736	1.63	UG/L	97
19)	1,1,1-TRICHLOROETHANE	13.79	405	569348	9.40	UG/L	99
20)	CARBON TETRACHLORIDE	14.19	418	473761	9.55	UG/L	99
22)	BROMODICHLOROMETHANE	14.73	436	565742	10.09	UG/L	98
23)	1,2-DICHLOROPROPANE	16.07	480	483912	10.08	UG/L	97
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	683404	14.03	UG/L	99
25)	TRICHLOROETHENE	16.92	508	389971	9.87	UG/L	98
26)	BENZENE-D6	17.26	519	1159025	9.75	UG/L	98
27)	BENZENE	17.41	524	1339157	9.71	UG/L	99
28)	DIBROMOCHLOROMETHANE	17.50	527	303937	10.36	UG/L	94
30)	1,1,2-TRICHLOROETHANE	17.62	531	196388	10.52	UG/L	99
31)	2-CHLOROETHYL VINYLETHER	18.72	567	146089	10.72	UG/L	93
32)	BROMOFORM	20.18	615	150202	10.82	UG/L	99
33)	*1,4-DICHLOROBUTANE (IS-3)	22.82	702	408779	10.00	UG/L	92
34)	4-METHYL-2-PENTANONE	20.72	633	3688	.20	UG/L	75
36)	TETRACHLOROETHENE	22.61	695	311901	9.34	UG/L	97
37)	1,1,2,2-TETRACHLOROETHANE	22.55	693	274196	9.88	UG/L	97
38)	TOLUENE-D8	23.73	732	578776	9.38	UG/L	99
39)	TOLUENE	23.91	738	731045	9.32	UG/L	99
40)	CHLOROBENZENE	25.10	777	732623	9.64	UG/L	99
41)	ETHYLBENZENE	27.41	853	418166	9.35	UG/L	99

* Compound is ISTD

:QREP,^TC347::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:27
Output File: ^TC347::QT Injected at: 880922 16:42
Data File: >TC347::A9 Dilution Factor: 1.00000
Name: 88FM30 S23MSD
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	147996	10.00	UG/L	69
5)	CHLOROETHANE	4.46	98	3842	.08	UG/L	92
6)	METHYLENE CHLORIDE	6.50	165	352254	9.00	UG/L	85
7)	ACROLEIN	7.38	194	515	.51	UG/L	77
8)	ACETONE	7.13	186	12161	3.93	UG/L	95
10)	CARBON DISULFIDE	8.08	217	13399	.08	UG/L	100
11)	1,1-DICHLOROETHENE	9.29	257	351593	8.62	UG/L	76
12)	1,1-DICHLOROETHANE	10.54	298	754240	8.63	UG/L	93
13)	1,2-DICHLOROETHENE (TOTAL)	11.27	322	368394	8.67	UG/L	80
14)	CHLOROFORM	11.85	341	661415	8.64	UG/L	99
15)	1,2-DICHLOROETHANE-D4	12.45	361	207323	9.66	UG/L	90
[illegible]	1,2-DICHLOROETHANE	12.54	364	280542	9.73	UG/L	92
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.81	570	580947	10.00	UG/L	98
18)	2-BUTANONE	12.51	363	1492	1.40	UG/L	92
19)	1,1,1-TRICHLOROETHANE	13.79	405	529846	8.72	UG/L	98
20)	CARBON TETRACHLORIDE	14.19	418	441551	8.87	UG/L	97
22)	BROMODICHLOROMETHANE	14.73	436	534739	9.51	UG/L	96
23)	1,2-DICHLOROPROPANE	16.07	480	450786	9.36	UG/L	95
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	645479	13.20	UG/L	99
25)	TRICHLOROETHENE	16.92	508	362060	9.13	UG/L	99
26)	BENZENE-D6	17.29	520	1175083	9.85	UG/L	98
27)	BENZENE	17.44	525	1247017	9.01	UG/L	97
28)	DIBROMOCHLOROMETHANE	17.50	527	294274	10.00	UG/L	95
30)	1,1,2-TRICHLOROETHANE	17.62	531	195788	10.45	UG/L	99
31)	2-CHLOROETHYL VINYLETHER	18.72	567	142349	10.41	UG/L	96
32)	BROMOFORM	20.21	616	148867	10.69	UG/L	99
33)	*1,4-DICHLOROBUTANE (IS-3)	22.85	703	417403	10.00	UG/L	92
34)	4-METHYL-2-PENTANONE	20.30	619	1895	.10	UG/L	91
35)	2-HEXANONE	22.09	678	1046	.08	UG/L	56
36)	TETRACHLOROETHENE	22.61	695	284498	8.34	UG/L	98
37)	1,1,2,2-TETRACHLOROETHANE	22.55	693	265442	9.37	UG/L	99
38)	TOLUENE-D8	23.73	732	578592	9.18	UG/L	98
39)	TOLUENE	23.91	738	685965	8.56	UG/L	97
40)	CHLOROBENZENE	25.10	777	675988	8.71	UG/L	98
41)	ETHYLBENZENE	27.44	854	386263	8.46	UG/L	97

* Compound is ISTD

:QREP,^TC348::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:29
Output File: ^TC348::QT Injected at: 880922 17:40
Data File: >TC348::A9 Dilution Factor: 1.00000
Name: 88FM30 S26
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.75	272	151820	10.00	UG/L	66
6)	METHYLENE CHLORIDE	6.50	165	6825	.17	UG/L	78
7)	ACROLEIN	7.32	192	763	.74	UG/L	90
8)	ACETONE	7.17	187	6996	2.20	UG/L	92
10)	CARBON DISULFIDE	8.05	216	24462	.14	UG/L	100
12)	1,1-DICHLOROETHANE	10.48	296	535	.01	UG/L	79
14)	CHLOROFORM	11.81	340	4194	.05	UG/L	84
15)	1,2-DICHLOROETHANE-D4	12.45	361	197193	8.96	UG/L	88
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.83	571	599495	10.00	UG/L	98
19)	1,1,1-TRICHLOROETHANE	13.79	405	16009	.26	UG/L	96
22)	BROMODICHLOROMETHANE	14.76	437	4041	.07	UG/L	89
[illegible]	1,2-DICHLOROPROPANE	16.07	480	2987	.06	UG/L	87
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	4272	.08	UG/L	96
26)	BENZENE-D6	17.28	520	1140925	9.27	UG/L	98
27)	BENZENE	17.31	521	12355	.09	UG/L	89
28)	DIBROMOCHLOROMETHANE	17.53	528	3172	.10	UG/L	85
29)	TRANS-1,3-DICHLOROPROPENE	17.62	531	1592	.03	UG/L	68
30)	1,1,2-TRICHLOROETHANE	17.65	532	4045	.21	UG/L	89
31)	2-CHLOROETHYL VINYLETHER	18.83	571	9364	.66	UG/L	60
33)	*1,4-DICHLOROBUTANE (IS-3)	22.85	703	425029	10.00	UG/L	94
35)	2-HEXANONE	22.66	697	1663	.13	UG/L	53
37)	1,1,2,2-TETRACHLOROETHANE	22.54	693	6599	.23	UG/L	98
38)	TOLUENE-D8	23.73	732	579954	9.04	UG/L	98
39)	TOLUENE	23.91	738	4674	.06	UG/L	91
40)	CHLOROBENZENE	25.13	778	4076	.05	UG/L	91

* Compound is ISTD

:QREP,^TC349::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:35
Output File: ^TC349::QT Injected at: 880922 18:38
Data File: >TC349::A9 Dilution Factor: 1.00000
Name: 88FM30 S27
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.72	271	152276	10.00	UG/L	72
6)	METHYLENE CHLORIDE	6.50	165	5685	.14	UG/L	87
8)	ACETONE	7.16	187	13950	4.38	UG/L	95
10)	CARBON DISULFIDE	8.05	216	8650	.05	UG/L	100
14)	CHLOROFORM	11.84	341	3239	.04	UG/L	92
15)	1,2-DICHLOROETHANE-D4	12.45	361	196491	8.90	UG/L	84
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.83	571	591588	10.00	UG/L	99
18)	2-BUTANONE	12.51	363	565	.52	UG/L	83
19)	1,1,1-TRICHLOROETHANE	13.82	406	2421	.04	UG/L	72
22)	BROMODICHLOROMETHANE	14.70	435	523	.01	UG/L	72
26)	BENZENE-D6	17.28	520	1159835	9.55	UG/L	98
[illegible]	BENZENE	17.25	519	10366	.07	UG/L	97
35)	*1,4-DICHLOROBUTANE (IS-3)	22.84	703	427958	10.00	UG/L	94
38)	TOLUENE-D8	23.73	732	585454	9.06	UG/L	98
39)	TOLUENE	23.94	739	3327	.04	UG/L	87

* Compound is ISTD

:QREP,^TC350::QT

QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:41
Output File: ^TC350::QT Injected at: 880922 19:36
Data File: >TC350::A9 Dilution Factor: 1.00000
Name: 88FM30 S28
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.75	272	150634	10.00	UG/L	65
6)	METHYLENE CHLORIDE	6.53	166	10712	.27	UG/L	86
8)	ACETONE	7.16	187	6085	1.93	UG/L	77
10)	CARBON DISULFIDE	8.05	216	8978	.05	UG/L	100
11)	1,1-DICHLOROETHENE	9.29	257	794	.02	UG/L	85
12)	1,1-DICHLOROETHANE	10.54	298	3522	.04	UG/L	85
14)	CHLOROFORM	11.84	341	8299	.11	UG/L	94
15)	1,2-DICHLOROETHANE-D4	12.45	361	194805	8.92	UG/L	88
16)	1,2-DICHLOROETHANE	12.54	364	8713	.30	UG/L	72
17)	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.80	570	582348	10.00	UG/L	99
19)	1,1,1-TRICHLOROETHANE	13.76	404	3688	.06	UG/L	86
[illegible]	VINYL ACETATE	14.06	414	603	.06	UG/L	68
22)	BROMODICHLOROMETHANE	14.76	437	9624	.17	UG/L	93
23)	1,2-DICHLOROPROPANE	16.07	480	8257	.17	UG/L	90
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	6177	.13	UG/L	90
25)	TRICHLOROETHENE	16.92	508	57053	1.44	UG/L	92
26)	BENZENE-D6	17.28	520	1151354	9.63	UG/L	96
27)	BENZENE	17.34	522	15336	.11	UG/L	92
28)	DIBROMOCHLOROMETHANE	17.50	527	7289	.25	UG/L	94
30)	1,1,2-TRICHLOROETHANE	17.62	531	6092	.32	UG/L	92
32)	BROMOFORM	20.20	616	3267	.23	UG/L	76
33)	*1,4-DICHLOROBUTANE (IS-3)	22.84	703	416166	10.00	UG/L	93
35)	2-HEXANONE	22.45	690	2316	.18	UG/L	59
37)	1,1,2,2-TETRACHLOROETHANE	22.54	693	2502	.09	UG/L	79
38)	TOLUENE-D8	23.73	732	578851	9.21	UG/L	98
39)	TOLUENE	23.91	738	5603	.07	UG/L	87
40)	CHLOROBENZENE	25.12	778	6690	.09	UG/L	89
41)	ETHYLBENZENE	27.43	854	1554	.03	UG/L	97

* Compound is ISTD

QREP,^TC351::QT

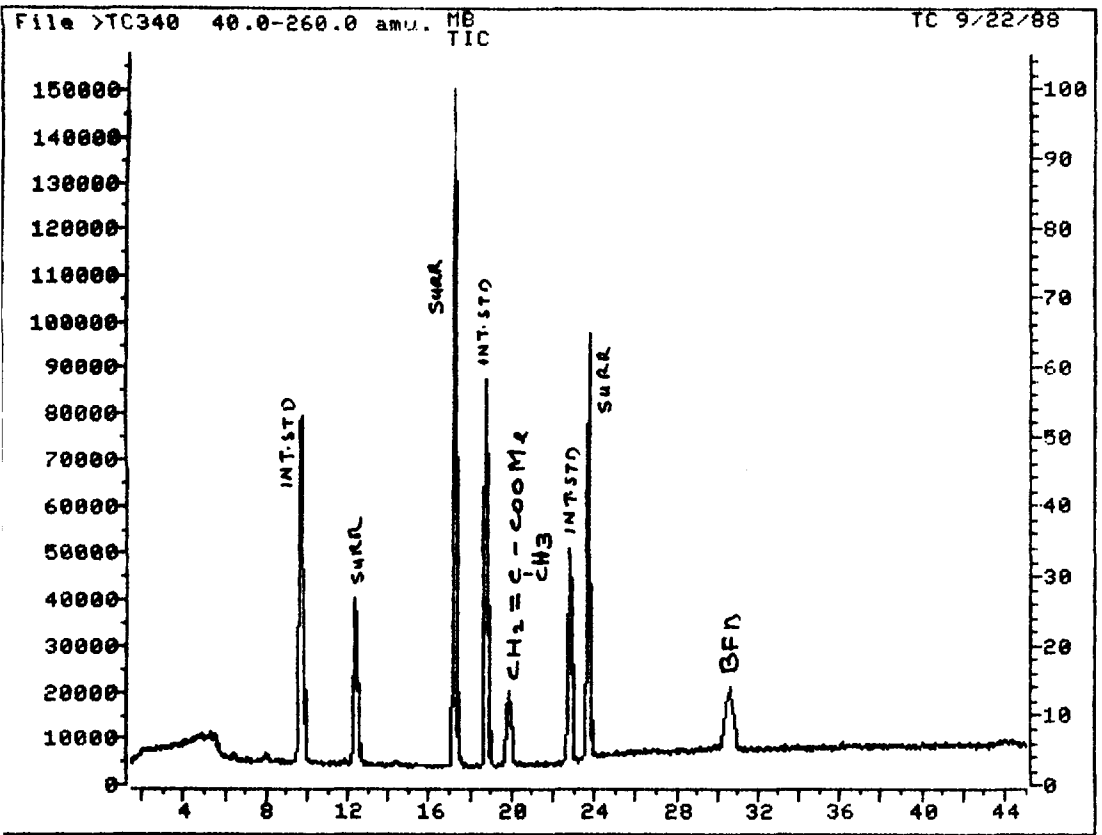
QUANT REPORT

Operator ID: CHACKO Quant Rev: 6 Quant Time: 880928 16:48
Output File: ^TC351::QT Injected at: 880922 20:34
Data File: >TC351::A9 Dilution Factor: 1.00000
Name: 88FM30 D24
Misc: PURGE 20ML TC 9/22/88 SF-5541

ID File: VOATC::A0
Title: 1D FILE FOR VOLATILES--HP5985B CC 6/3/88 (20 ML PURGE)
Last Calibration: 880928 15:47

	Compound	R.T.	Scan#	Area	Conc	Units	q
1)	*BROMOCHLOROMETHANE (IS-1)	9.75	272	150339	10.00	UG/L	66
6)	METHYLENE CHLORIDE	6.53	166	11033	.28	UG/L	87
7)	ACROLEIN	7.29	191	570	.56	UG/L	91
8)	ACETONE	7.16	187	11659	3.70	UG/L	85
10)	CARBON DISULFIDE	8.08	217	15253	.09	UG/L	100
11)	1,1-DICHLOROETHENE	9.29	257	1328	.03	UG/L	66
12)	1,1-DICHLOROETHANE	10.54	298	4896	.06	UG/L	91
13)	1,2-DICHLOROETHENE (TOTAL)	11.33	324	1066	.02	UG/L	85
14)	CHLOROFORM	11.84	341	8526	.11	UG/L	87
15)	1,2-DICHLOROETHANE-D4	12.45	361	193821	8.89	UG/L	85
16)	1,2-DICHLOROETHANE	12.57	365	9467	.32	UG/L	87
[illegible]	*2-BROMO-1-CHLOROPROPANE (IS-2)	18.83	571	578373	10.00	UG/L	98
19)	1,1,1-TRICHLOROETHANE	13.79	405	3471	.06	UG/L	95
22)	BROMODICHLOROMETHANE	14.73	436	10147	.18	UG/L	96
23)	1,2-DICHLOROPROPANE	16.10	481	7189	.15	UG/L	91
24)	CIS-1,3-DICHLOROPROPENE	16.34	489	7718	.16	UG/L	92
25)	TRICHLOROETHENE	16.95	509	57444	1.46	UG/L	99
26)	BENZENE-D6	17.28	520	1134381	9.56	UG/L	98
27)	BENZENE	17.43	525	16718	.12	UG/L	99
28)	DIBROMOCHLOROMETHANE	17.53	528	8293	.28	UG/L	97
29)	TRANS-1,3-DICHLOROPROPENE	17.62	531	3438	.07	UG/L	88
30)	1,1,2-TRICHLOROETHANE	17.65	532	6135	.33	UG/L	97
33)	*1,4-DICHLOROBUTANE (IS-3)	22.84	703	419652	10.00	UG/L	95
34)	4-METHYL-2-PENTANONE	20.32	620	1632	.09	UG/L	89
36)	TETRACHLOROETHENE	22.60	695	643	.02	UG/L	83
37)	1,1,2,2-TETRACHLOROETHANE	22.54	693	2810	.10	UG/L	93
38)	TOLUENE-D8	23.76	733	568039	8.97	UG/L	97
39)	TOLUENE	23.94	739	7787	.10	UG/L	91
40)	CHLOROBENZENE	25.12	778	8838	.11	UG/L	88
41)	ETHYLBENZENE	27.50	856	3035	.07	UG/L	97

* Compound is ISTD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TC 9/22/88
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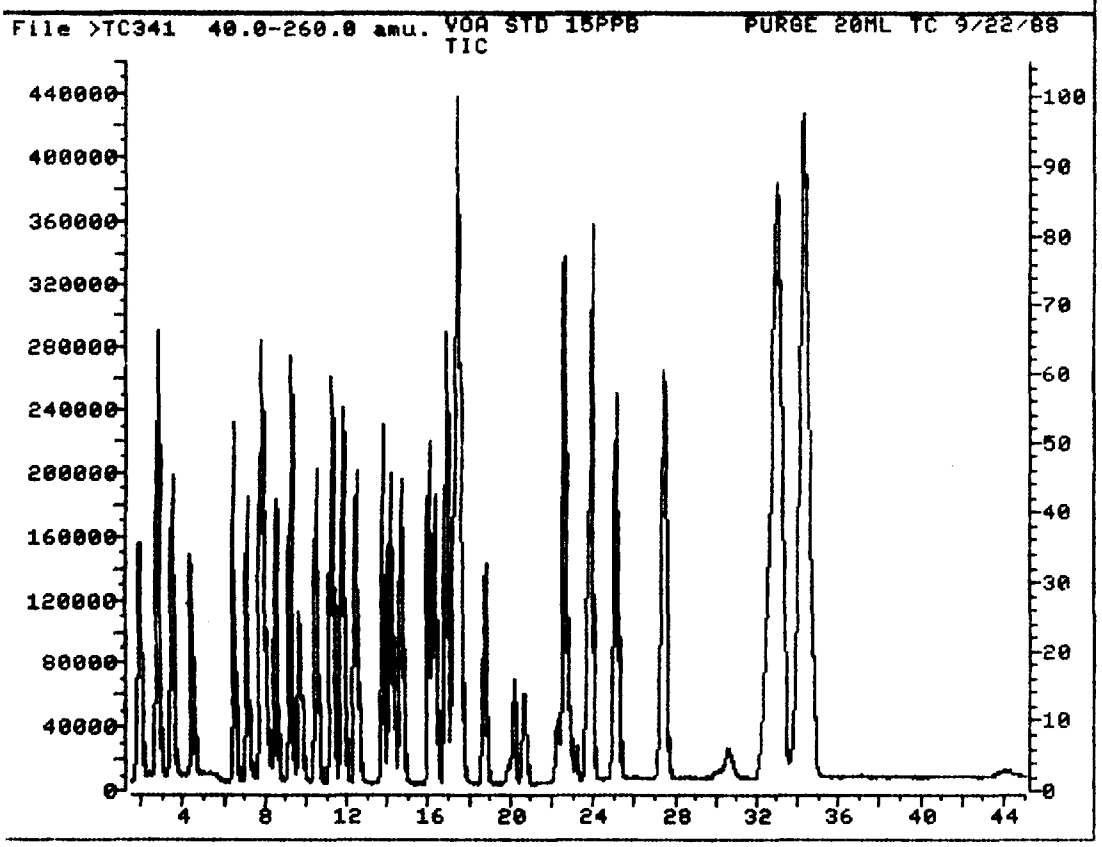
SURR
SURR
INT.STD
CH2=C-COOM2
CH3
INT.STD
SURR
BFB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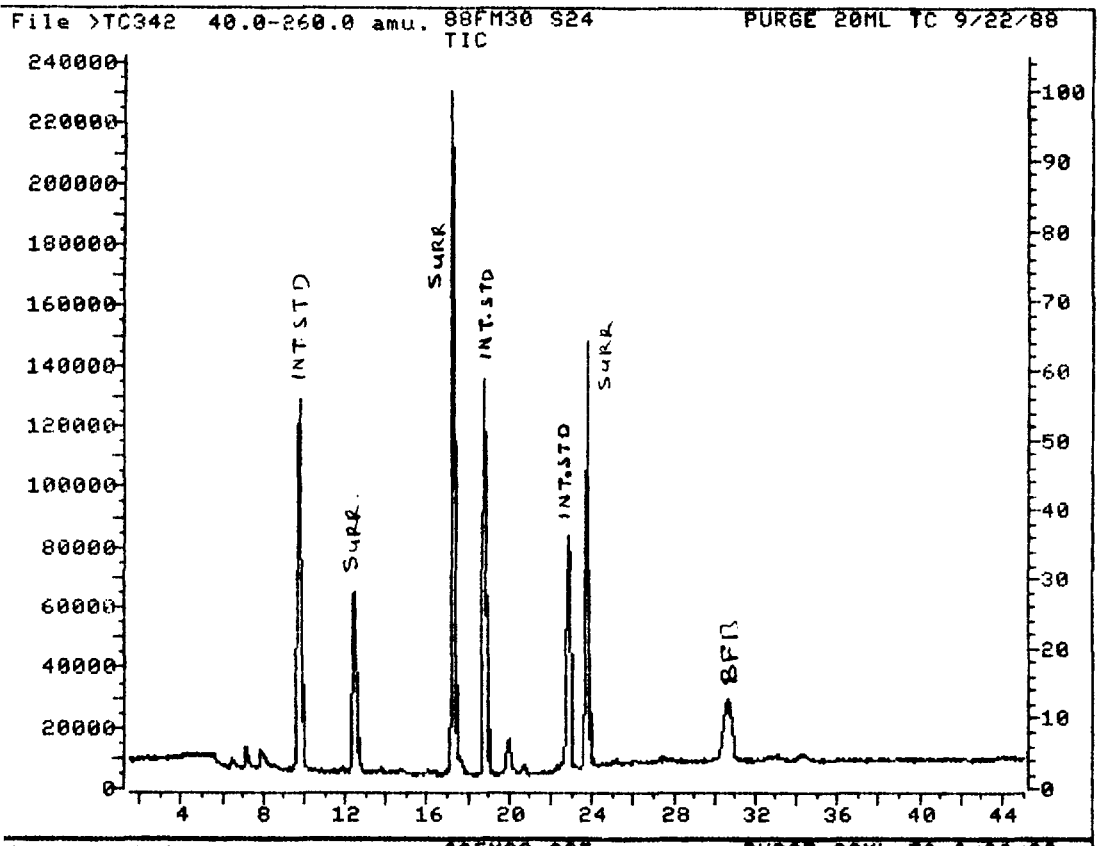
PURGE 20ML TC 9/22/88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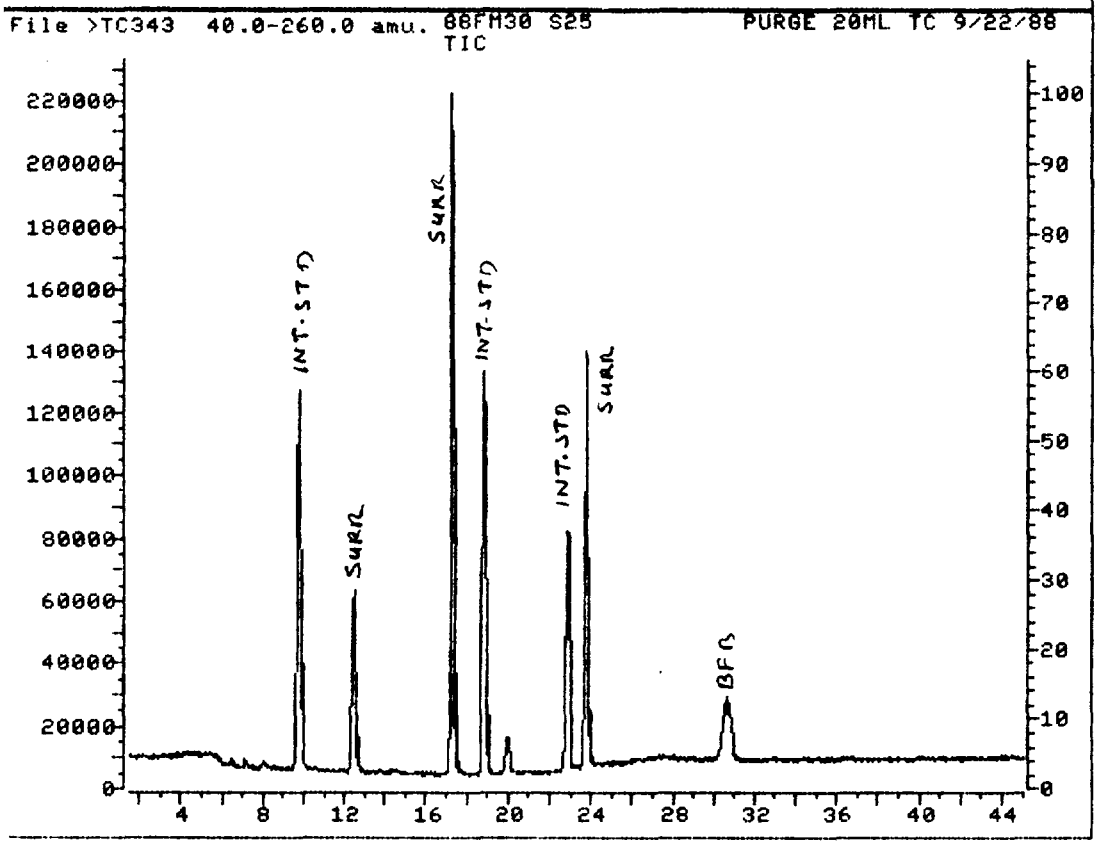
PURGE 20ML TC 9/22/88
INT STD
SURR
SURR
INT.STD
INT.STD
SURR
BFB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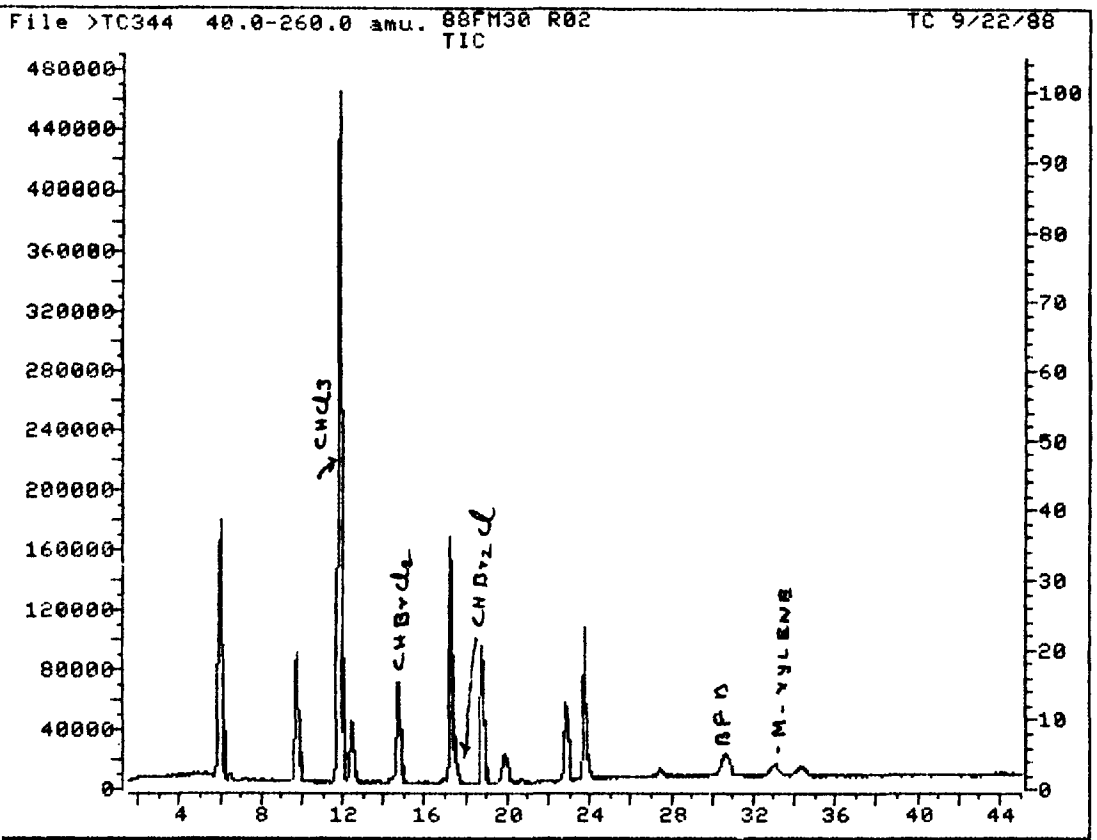
PURGE 20ML TC 9/22/88
INT.STD
SURR
SURR
INT.STD
INT.STD
SURR
BFB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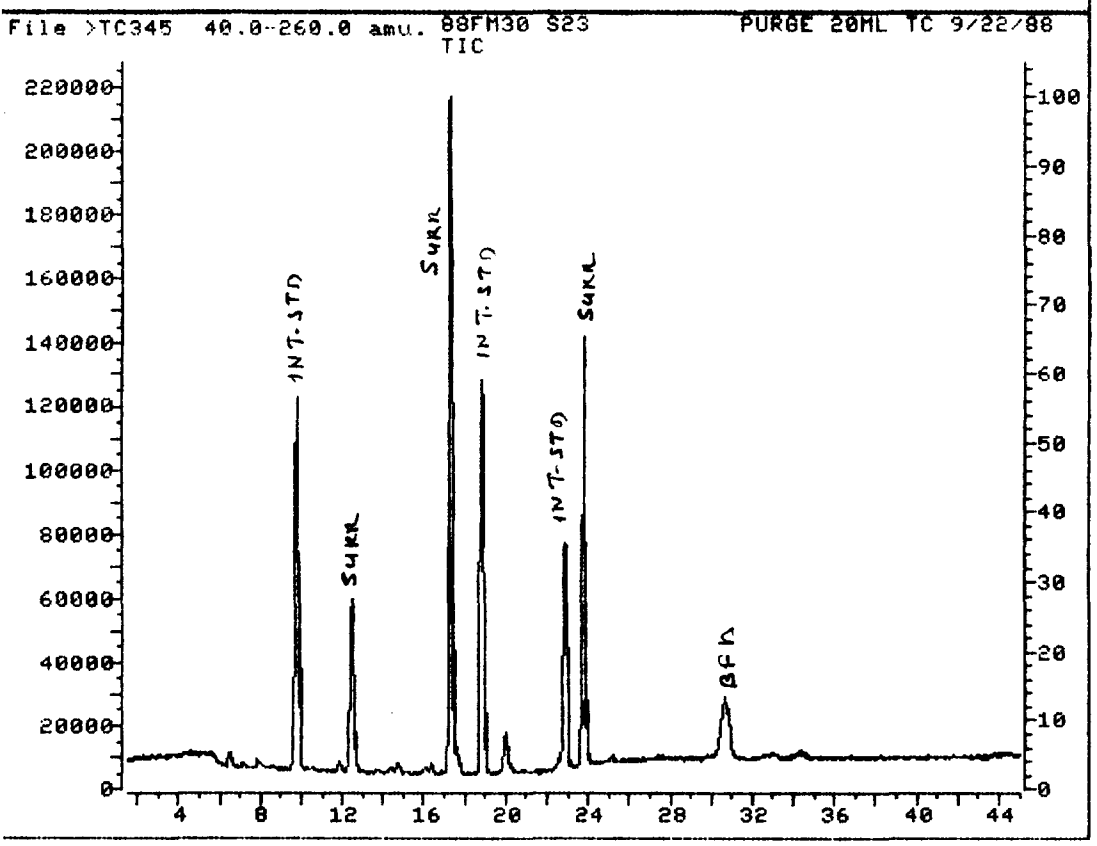
TC 9/22/88
CHCl3
CHBrCl2
CHBr2Cl
BPN
M-XYLENE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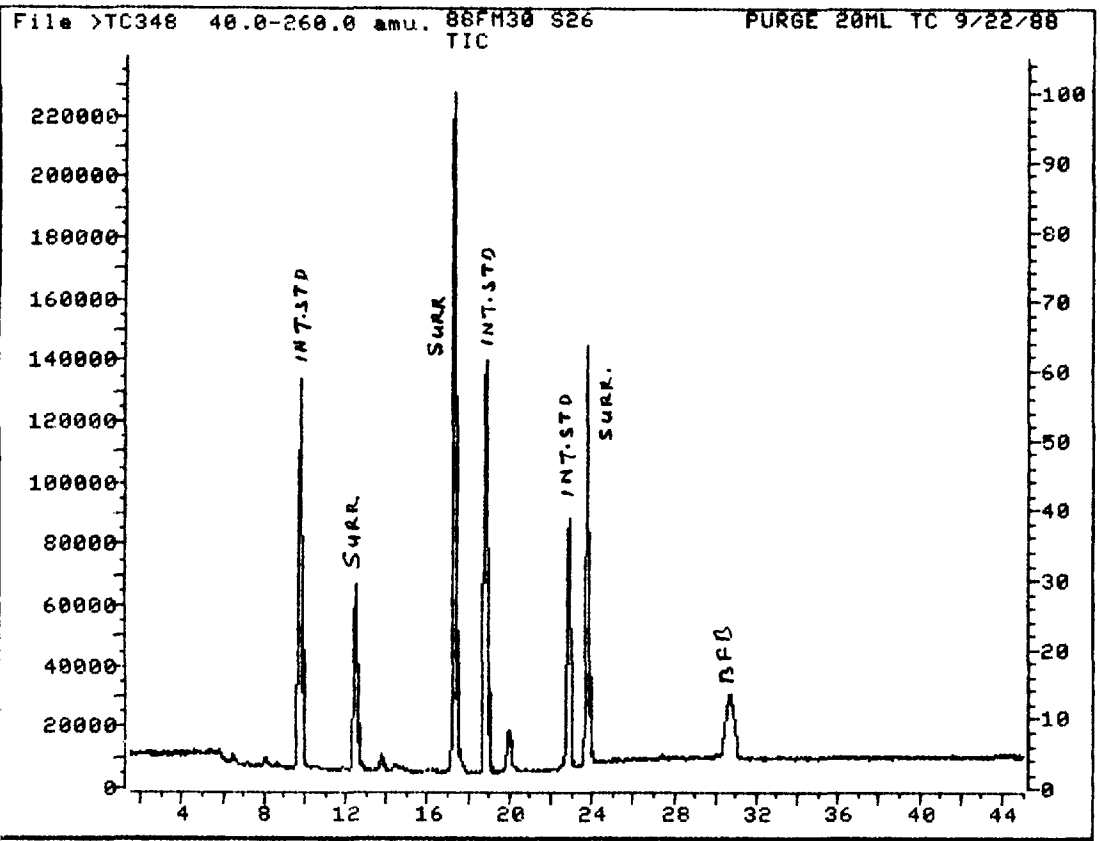
TIC
PURGE 20ML TC 9/22/88
INT-STD
SURR
SURR
INT-STD
INT-STD
SURR
BFN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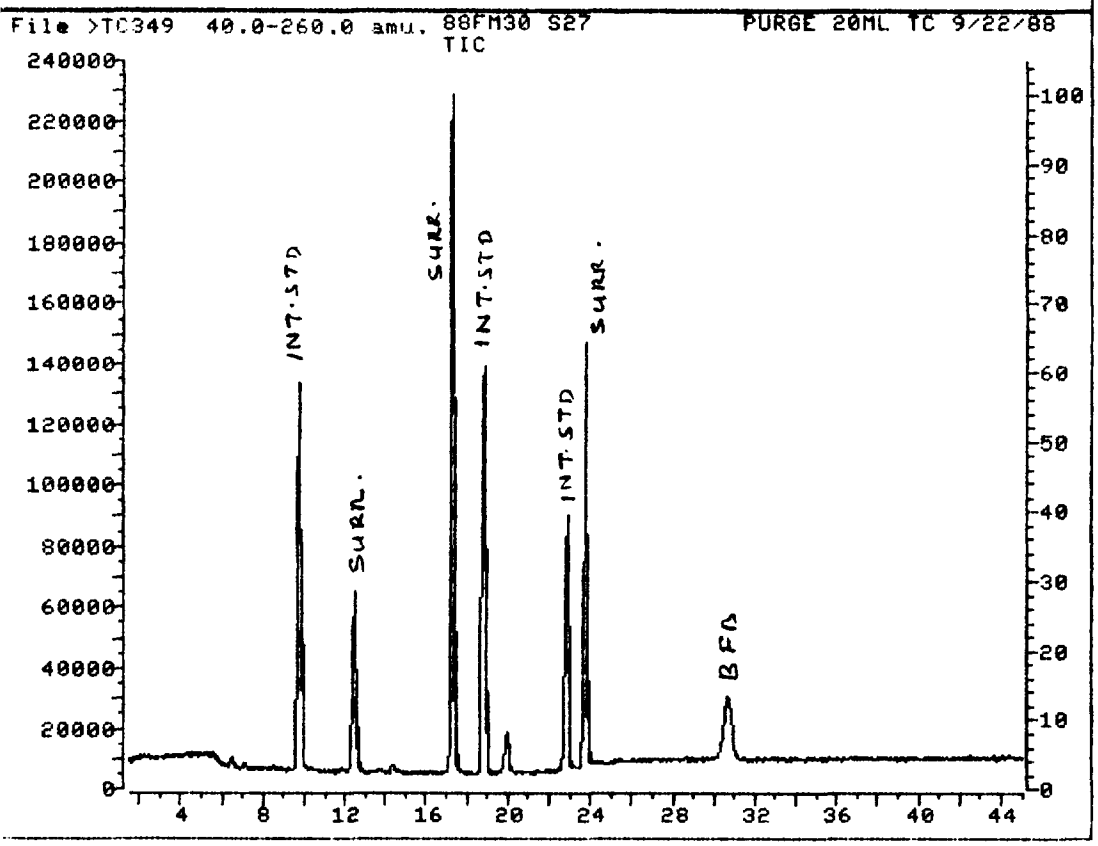
INT.STD
SURR
SURR
INT.STD
INT.STD
SURR.
BFB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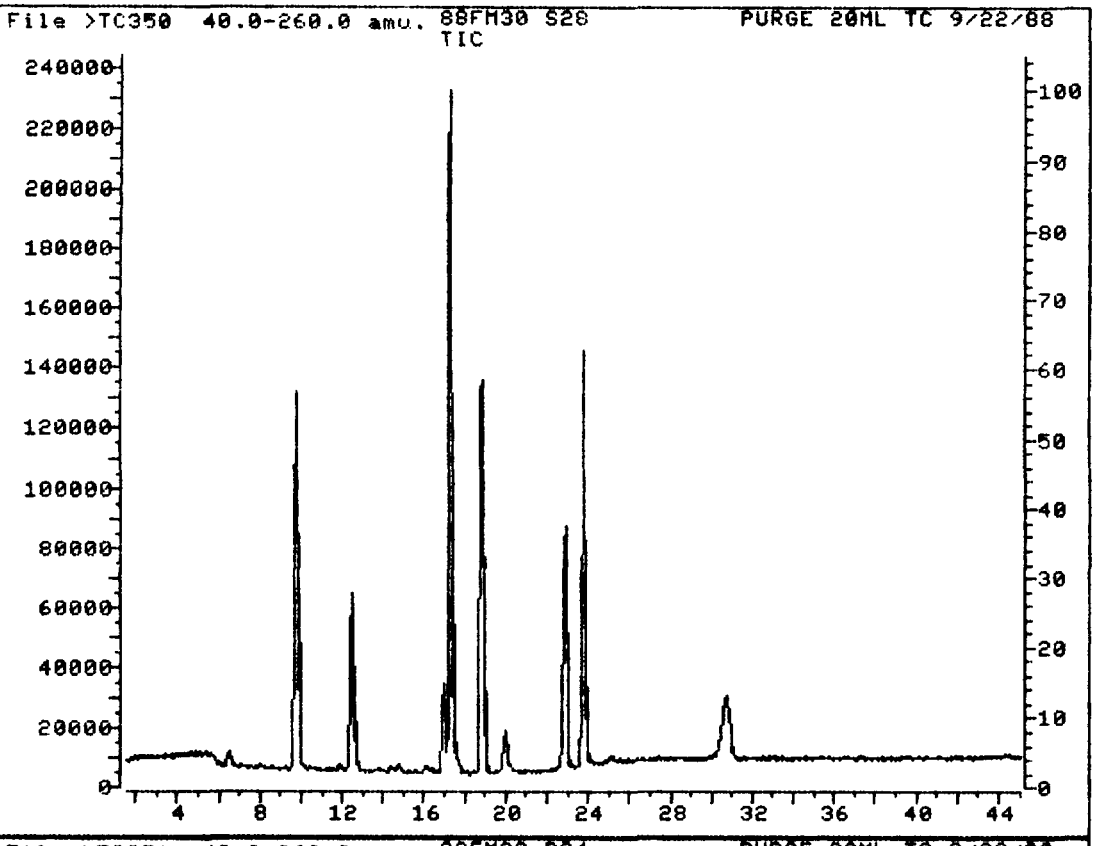
INT.STD
SURR.
SURR.
INT.STD
INT.STD
SURR.
BFB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PURGE 20ML TC 9/22/88
240000
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
100
90
80
70
60
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40
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20
10
0
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8
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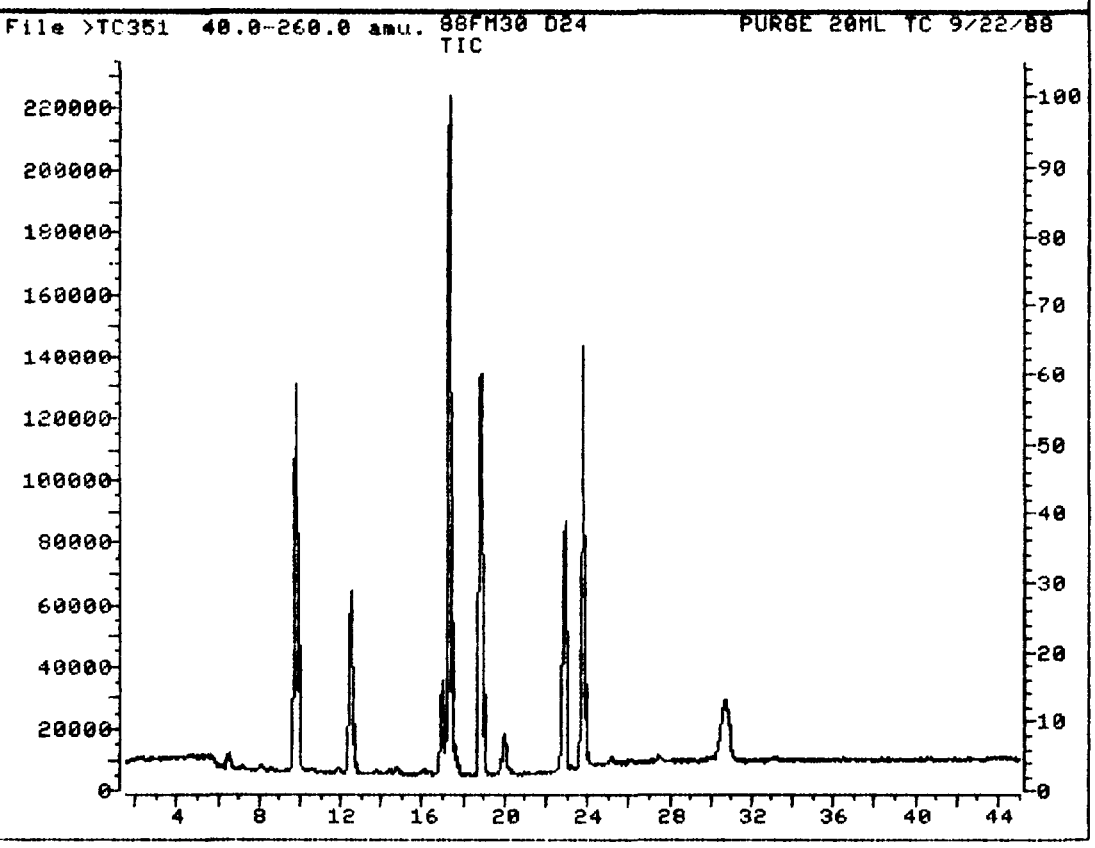
16
20
24
28
32
36
40
44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TIC
PURGE 20ML TC 9/22/88
220000
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
100
90
80
70
60
50
40
30
20
10
0
4
8
12
16
20
24
28
32
36
40
44