O.H. Materials Corp.
P.O. Box 41
Windsor, NJ 08561-0041
609-443-2800

OHM

PANE

January 14, 1988

Mr. Michael Polito
USEPA Region II
Emergency Response Unit
Woodbridge Avenue
Edison, NJ 08837

Dear Mr. Polito:

RE: USEPA; Contract #68-01-7445; Zone I ERCS

Enclosed is the Quality Assurance Data Report for the month of December 1987, in response to the Zone I ERCS Contract.

The analytical information enclosed was received on the following Delivery Orders during the month of November:

#7445-02-030
#7445-02-006
#7445-02-008

Please feel free to contact me at any time if additional information is required.

Sincerely,

John E. Copus

John E. Copus
Deputy Program Manager
ERCS Zone I

JEC:prz

Enclosure

pc: Carla Dempsey, Hazardous Site Evaluation Div.
File 5302, 5481, 5359

006

433404

P U R C H A S E O R D E R S E A R C H

VENDOR: 96413
WASTEX INDUSTRIES, INC.
28 S. HANOVER ST.

POTTSTOWN PA
(215)327-0880
P/O TOTAL $5,794.00

P/O # J05359-036362-
P/O DATE 11/25/87
REQUESTOR J.BATES
APPROVAL LEE ZALIS

DEL DATE 11/25/87
CONFIRMED 11/23/87

QTY	PART NO	DESCRIPTION	PRICE	ACCT #
		SAMPLES FROM OHM SITE IN NEWARK,NJ		
		TO BE ANALYZED FOR DISPOSAL		
		ANALYSIS GC/MS		
		2 WEEK TURN AROUND		
1 -		AQUEOUS	950.00	652
3 -		LANDFILL	1,195.00	652
1 -		INCINERATION	1,195.00	652
2 -		TOTAL, FREE, & AMENABLE CYANIDE	32.00	652

Wastex Industries, Inc.

Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.011

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-18-87 9:00 AM
Sampled By JC/BD
Sample composite
Sample ID

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
1 4529-27 Base/Neutral Solid Composite

General	Landfill Analysis		
TOC	134,000	mg/kg	
pH	9.00		
Cyanide Total	<0.01	mg/kg	
Cyanide Amenable	<0.01	mg/kg	
Sulfide Total	<0.5	mg/kg	
Phenols	2,021.8	mg/kg	
Paint Filter	<1	%	Free Liquid
Flash Point	<80	°F	
Metals	E.P. TOX		
Arsenic	<0.005	mg/l	
Barium	<0.1	mg/l	
Cadmium	0.03	mg/l	
Chromium	0.3	mg/l	
Lead	1.4	mg/l	
Mercury	<0.0005	mg/l	
Selenium	<0.005	mg/l	
Silver	<0.01	mg/l	
Pesticides & Herbicides	E.P. TOX		
Pesticides:			
Endrin	<0.0002	mg/l	
Lindane	<0.004	mg/l	
Methoxychlor	<0.1	mg/l	
Toxaphene	<0.005	mg/l	
Herbicides:			
2,4,D	<0.1	mg/l	
Silvex (2,4,5,-TP)	<0.01	mg/l	
Pesticides			
Aldrin	<0.02	mg/kg	
alpha-BHC	<0.02	mg/kg	
beta-BHC	<0.02	mg/kg	

Sample # 871123.011

gamma-BHC	<0.02	mg/kg
delta-BHC	<0.02	mg/kg
4,4'-DDT	<0.02	mg/kg
4,4'-DDE	<0.02	mg/kg
4,4'-DDD	<0.02	mg/kg
Dieldrin	<0.02	mg/kg
alpha-Endosulfan	<0.02	mg/kg
beta-Endosulfan	<0.02	mg/kg
Endosulfan Sulfate	<0.02	mg/kg
Endrin	<0.02	mg/kg
Endrin Aldehyde	<0.02	mg/kg
Heptachlor	<0.02	mg/kg
Heptachlor Epoxide	<0.02	mg/kg
PCB-1242	<0.2	mg/kg
PCB-1254	<0.2	mg/kg
PCB-1221	<0.2	mg/kg
PCB-1232	<0.2	mg/kg
PCB-1260	<0.2	mg/kg
PCB-1016	<0.2	mg/kg
PCB-1248	<0.2	mg/kg
Chlordane	<0.2	mg/kg
Toxaphene	<0.5	mg/kg

GC/MS

GC/MS Volatiles	see attached sheets
GC/MS Base/Neutrals	see attached sheets
GC/MS Acid Compounds	see attached sheets

Signature _____

Wastex Industries, Inc.

P.A. DER 46005
N.J. DEP 77371

Licensed Analytical Laboratories

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.012

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-17-87 4:00 PM
Sampled By JC/BD
Sample composite
Sample ID

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
2 4529-26 Organic Solid Composite
5 4529-29 Cyanide Solid

	General	Incineration Analysis	
Dissolved Solids		NA	
Suspended Solids		NA	
Total Solids		84.21	%
Flash Point		>140	°F
Moisture Content		0.09	%
Sediment Content		100	%
BTU Content		13,470	BTU/lb
Ash Content		7.42	%
Density		1.65	g/ml
	Metals		
Antimony		<0.5	mg/kg
Arsenic		<0.5	mg/kg
Barium		<5	mg/kg
Beryllium		<0.5	mg/kg
Cadmium		0.55	mg/kg
Chromium		<5	mg/kg
Chromium (HEX)		<0.5	mg/kg
Copper		16	mg/kg
Iron		335	mg/kg
Lead		13	mg/kg
Manganese		7.5	mg/kg
Mercury		<0.05	mg/kg
Nickel		<2	mg/kg
Selenium		1.9	mg/kg
Silver		<0.5	mg/kg
Thallium		<5	mg/kg
Zinc		405	mg/kg
	Anions		
Bromine Content		<100	mg/kg

Sample # 871123.012

Chlorine Content	8,536	mg/kg
Iodine Content	<100	mg/kg
Sulfur Content	15,530	mg/kg

Pesticides

Aldrin	<0.02	mg/kg
alpha-BHC	<0.02	mg/kg
beta-BHC	<0.02	mg/kg
gamma-BHC	<0.02	mg/kg
delta-BHC	<0.02	mg/kg
4,4'-DDT	<0.02	mg/kg
4,4'-DDE	<0.02	mg/kg
4,4'-DDD	<0.02	mg/kg
Dieldrin	<0.02	mg/kg
alpha-Endosulfan	<0.02	mg/kg
beta-Endosulfan	<0.02	mg/kg
Endosulfan Sulfate	<0.02	mg/kg
Endrin	<0.02	mg/kg
Endrin Aldehyde	<0.02	mg/kg
Heptachlor	<0.02	mg/kg
Heptachlor Epoxide	<0.02	mg/kg
PCB-1242	<0.2	mg/kg
PCB-1254	<0.2	mg/kg
PCB-1221	<0.2	mg/kg
PCB-1232	<0.2	mg/kg
PCB-1260	<0.2	mg/kg
PCB-1016	<0.2	mg/kg
PCB-1248	<0.2	mg/kg
Chlordane	<0.2	mg/kg
Toxaphene	<0.5	mg/kg

GC/MS

GC/MS Volatiles	see attached sheets
GC/MS Base/Neutrals	see attached sheets
GC/MS Acid Compounds	see attached sheets

NA = Not Applicable

Signature _____

Wastex Industries, Inc.

Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.013

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-17-87 8:00 AM
Sampled By JC/JK/BS
Sample composite
Sample ID

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
3 4529-25 Organic Liquid Composite

General	Incineration Analysis	
Dissolved Solids	15.46	%
Suspended Solids	3.66	%
Total Solids	42.92	%
Flash Point	92	°F
Moisture Content	28.27	%
Sediment Content	25	%
BTU Content	12,370	BTU/lb
Ash Content	2.51	%
Density	1.09	g/ml
Metals		
Antimony	<0.5	mg/kg
Arsenic	<0.5	mg/kg
Barium	<5	mg/kg
Beryllium	<0.5	mg/kg
Cadmium	<0.5	mg/kg
Chromium	<5	mg/kg
Chromium (HEX)	<0.5	mg/kg
Copper	1	mg/kg
Iron	<1	mg/kg
Lead	1.6	mg/kg
Manganese	<1	mg/kg
Mercury	<0.05	mg/kg
Nickel	<2	mg/kg
Selenium	<0.5	mg/kg
Silver	<0.5	mg/kg
Thallium	<5	mg/kg
Zinc	30	mg/kg
Anions		
Bromine Content	<100	mg/kg
Chlorine Content	22,500	mg/kg

Sample # 871123.013

Iodine Content	<100	mg/kg
Sulfur Content	9,180	mg/kg
Pesticides		
Aldrin	<0.02	mg/kg
alpha-BHC	<0.02	mg/kg
beta-BHC	<0.02	mg/kg
gamma-BHC	<0.02	mg/kg
delta-BHC	<0.02	mg/kg
4,4'-DDT	<0.02	mg/kg
4,4'-DDE	<0.02	mg/kg
4,4'-DDD	<0.02	mg/kg
Dieldrin	<0.02	mg/kg
alpha-Endosulfan	<0.02	mg/kg
beta-Endosulfan	<0.02	mg/kg
Endosulfan Sulfate	<0.02	mg/kg
Endrin	<0.02	mg/kg
Endrin Aldehyde	<0.02	mg/kg
Heptachlor	<0.02	mg/kg
Heptachlor Epoxide	<0.02	mg/kg
PCB-1242	<0.2	mg/kg
PCB-1254	<0.2	mg/kg
PCB-1221	<0.2	mg/kg
PCB-1232	<0.2	mg/kg
PCB-1260	<0.2	mg/kg
PCB-1016	<0.2	mg/kg
PCB-1248	<0.2	mg/kg
Chlordane	<0.2	mg/kg
Toxaphene	<0.5	mg/kg
GC/MS		
GC/MS Volatiles	see attached sheets	
GC/MS Base/Neutrals	see attached sheets	
GC/MS Acid Compounds	see attached sheets	

Signature _____

Wastex Industries, Inc.

Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.014

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-17-87 10:00 AM
Sampled By JC/BD
Sample composite
Sample ID Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
4 4529-23 Halogenated Organic Liquid Composite

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

Anions		
Bromine	<100	mg/kg
Chlorine	101,800	mg/kg
Fluorine	<100	mg/kg
Iodine	<100	mg/kg

Signature

Wastex Industries, Inc.

P.A. DER 46005
N.J. DEP 77371

Licensed Analytical Laboratories

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.015

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-18-87 11:30 AM Date Rec. 11-23-87 10:20 AM
Sampled By JC/MK Rec by SLG
Sample grab PWS ID :
Sample ID Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
5 4529-29 Cyanide Solid

General

Cyanide Reactive	<5	mg/kg non reactive
Cyanide Amenable	<0.01	mg/kg

Signature

Wastex Industries, Inc.

P.A. DER 46005
N.J. DEP 77371

Licensed Analytical Laboratories

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.016

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-17-87 3:00 AM Date Rec. 11-23-87 10:20 AM
Sampled By JK/JC Rec by SLG
Sample grab PWS ID :
Sample ID Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
6 4529-21 Cyanide Liquid

General

Cyanide Total	0.09	mg/kg
Cyanide Amenable	<0.01	mg/kg
Cyanide Free	<5	mg/kg

Signature

Wastex Industries, Inc.

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P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.017

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-19-87
Sampled By JC
Sample composite
Sample ID Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
1 4529-24 Acid Liquid Composite

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

General	**Wastewater Analysis**	
TOC	74,700	mg/l
Acidity CaCO3	<1	mg/kg
pH	<1	
Cyanide Total	0.80	mg/kg
Cyanide Amenable	<0.01	mg/kg
Kjeldahl Nitrogen	5,300	mg/kg
Sulfide Total	<0.5	mg/kg
Dissolved Solids	17.61	%
Suspended Solids	9.85	%
Total Solids	33.08	%
Phenols	173.7	mg/kg
Flash Point	125	°F
Density	1.13	g/ml
Metals		
Arsenic	0.6	mg/kg
Barium	<2	mg/kg
Cadmium	0.4	mg/kg
Chromium	2.2	mg/kg
Chromium (HEX)	0.4	mg/kg
Copper	162	mg/kg
Iron	360	mg/kg
Lead	6	mg/kg
Manganese	27	mg/kg
Mercury	0.07	mg/kg
Nickel	9.2	mg/kg
Selenium	<0.1	mg/kg
Silver	<0.2	mg/kg
Thallium	<2	mg/kg
Zinc	126	mg/kg

Pesticides

Aldrin	<0.02	mg/kg
alpha-BHC	<0.02	mg/kg
beta-BHC	<0.02	mg/kg
gamma-BHC	<0.02	mg/kg
delta-BHC	<0.02	mg/kg
4,4'-DDT	<0.02	mg/kg
4,4'-DDE	<0.02	mg/kg
4,4'-DDD	<0.02	mg/kg
Dieldrin	<0.02	mg/kg
alpha-Endosulfan	<0.02	mg/kg
beta-Endosulfan	<0.02	mg/kg
Endosulfan Sulfate	<0.02	mg/kg
Endrin	<0.02	mg/kg
Endrin Aldehyde	<0.02	mg/kg
Heptachlor	<0.02	mg/kg
Heptachlor Epoxide	<0.02	mg/kg
PCB-1242	<0.2	mg/kg
PCB-1254	<0.2	mg/kg
PCB-1221	<0.2	mg/kg
PCB-1232	<0.2	mg/kg
PCB-1260	<0.2	mg/kg
PCB-1016	<0.2	mg/kg
PCB-1248	<0.2	mg/kg
Chlordane	<0.2	mg/kg
Toxaphene	<0.5	mg/kg

GC/MS

GC/MS Volatiles	see attached sheets
GC/MS Base/Neutrals	see attached sheets
GC/MS Acid Compounds	see attached sheets

Signature _____

Wastex Industries, Inc.

Licensed Analytical Laboratories

P.A. DER 46005
N.J. DEP 77371

28 S. Hanover Street Pottstown, PA. 19464 215/327-0880
125 Main Avenue Elmwood Park, N.J. 07407 201/791-6700

P.O. # J5359-E4-36362
Sample # 871123.018

Customer # ohmate
For O.H. Materials Corp.
P.O. Box 41
Windsor NJ 08561-0041
Attn: Jim Bates

Date Sampled 11-18-87 10:30 AM
Sampled By JC/BD
Sample composite
Sample ID Newark NJ U.S. E.P.A. Region II Proj. 5359-E4
2 4529-28 Acid Solid Composite

Date Rec. 11-23-87 10:20 AM
Rec by SLG
PWS ID :

General	Landfill Analysis		
TOC	137,000	mg/kg	
pH	<1		
Cyanide Total	1.34	mg/kg	
Cyanide Amenable	<0.01	mg/kg	
Sulfide Total	<0.5	mg/kg	
Phenols	27.7	mg/kg	
Paint Filter	<1	%	free liquid
Flash Point	>140	°F	
Metals	**E.P. TOX**		
Arsenic	0.013	mg/l	
Barium	<0.1	mg/l	
Cadmium	0.2	mg/l	
Chromium	<0.05	mg/l	
Lead	1.9	mg/l	
Mercury	<0.0005	mg/l	
Selenium	<0.005	mg/l	
Silver	<0.01	mg/l	
Pesticides & Herbicides	**E.P. TOX**		
Pesticides:			
Endrin	<0.0002	mg/l	
Lindane	<0.004	mg/l	
Methoxychlor	<0.1	mg/l	
Toxaphene	<0.005	mg/l	
Herbicides:			
2,4,D	<0.1	mg/l	
Silvex (2,4,5,-TP)	<0.01	mg/l	
Pesticides			
Aldrin	<0.02	mg/kg	
alpha-BHC	<0.02	mg/kg	
beta-BHC	<0.02	mg/kg	

gamma-BHC	<0.02	mg/kg
delta-BHC	<0.02	mg/kg
4,4'-DDT	<0.02	mg/kg
4,4'-DDE	<0.02	mg/kg
4,4'-DDD	<0.02	mg/kg
Dieldrin	<0.02	mg/kg
alpha-Endosulfan	<0.02	mg/kg
beta-Endosulfan	<0.02	mg/kg
Endosulfan Sulfate	<0.02	mg/kg
Endrin	<0.02	mg/kg
Endrin Aldehyde	<0.02	mg/kg
Heptachlor	<0.02	mg/kg
Heptachlor Epoxide	<0.02	mg/kg
PCB-1242	<0.2	mg/kg
PCB-1254	<0.2	mg/kg
PCB-1221	<0.2	mg/kg
PCB-1232	<0.2	mg/kg
PCB-1260	<0.2	mg/kg
PCB-1016	<0.2	mg/kg
PCB-1248	<0.2	mg/kg
Chlordane	<0.2	mg/kg
Toxaphene	<0.5	mg/kg

GC/MS

GC/MS Volatiles	see attached sheets
GC/MS Base/Neutrals	see attached sheets
GC/MS Acid Compounds	see attached sheets

Signature _____

ANALYTICAL RESULTS AND SUPPORTING DOCUMENTS FOR THE ANALYSIS OF WASTE SAMPLES SUBMITTED BY WASTEX INDUSTRIES INC.

SUBMITTED BY
C.A.L. TECHNOLOGIES INC.
19 ROSS STREET
SOMERVILLE, N.J. 08876

Thomas Sabatino,
Vice President
12/14/87

SECTION 1.0
LABORATORY CHRONICLE AND ANALYTICAL REPORTS FOR THE ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN WASTE SAMPLES

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL, SEDIMENT, SLUDGE AND WASTE MATERIALS, METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY

FORM: VOAFORM8

CLIENT	WASTEX INDUSTRIES INC.	GC/MS REF#	V009A26A.D
SAMPLE #	871123.011	MATRIX	LIQUID WASTE
COLLECTED	11/18/87	DATE ANALYZED	11/30/87
C.A.L. #	87-822	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	12/12/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	70.2

COMPOUND	CAS #	CONCENTRATION MGS/KG (1)	PQL (2) MGS/KG
Chloromethane	74-87-3	N.D.<1.00	1.00
Bromomethane	74-83-9	N.D.<1.00	1.00
Vinyl Chloride	75-01-4	N.D.<1.00	1.00
Chloroethane	75-00-3	N.D.<1.00	1.00
Methylene Chloride	75-09-2	8.80	0.50
Acetone	67-64-1	N.D.<10.0	10.0
Carbon Disulfide	75-15-0	N.D.<1.00	1.00
Trichlorofluoromethane	75-69-4	N.D.<0.50	0.50
Dichlorodifluoromethane		N.D.<0.50	0.50
1,1-Dichloroethene	75-35-4	N.D.<0.50	0.50
1,1-Dichloroethane	75-35-3	N.D.<0.50	0.50
trans-1,2-Dichloroethene	156-60-5	N.D.<0.50	0.50
Chloroform	67-66-3	N.D.<0.50	0.50
1,2-Dichloroethane	107-06-2	N.D.<0.50	0.50
2-Butanone	78-93-3	N.D.<10.0	10.0
1,1,1-Trichloroethane	75-55-6	N.D.<0.50	0.50
Carbon Tetrachloride	56-23-5	N.D.<0.50	0.50
Vinyl Acetate	108-05-4	N.D.<5.00	5.00
Bromodichloromethane	75-27-4	N.D.<0.50	0.50
1,2-Dichloropropane	78-87-5	N.D.<10.0	1.00
cis-1,3-Dichloropropene	10061-01-5	N.D.<10.0	1.00
Trichloroethene	79-01-6	N.D.<0.50	0.50
Benzene	71-43-2	N.D.<0.50	0.50
Dibromochloromethane	124-48-1	N.D.<0.50	0.50
1,1,2-Trichloroethane	79-00-5	N.D.<0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	N.D.<10.0	1.00
2-Chloroethylvinyl Ether	110-75-8	N.D.<10.0	1.00
Bromoform	75-25-2	N.D.<0.50	0.50
1,1,2,2-Tetrachloroethane	79-34-5	N.D.<0.50	0.50
Tetrachloroethene	127-18-4	0.435	0.50
2-Hexanone	591-78-6	N.D.<5.00	5.00
4-Methyl-2-pentanone	108-10-1	N.D.<5.00	5.00
Toluene	108-88-3	1.51	0.50
Chlorobenzene	108-90-7	N.D.<0.50	0.50
Ethylbenzene	100-41-4	0.532	0.50
Styrene	100-42-5	N.D.<0.50	0.50
1,3 + 1,4- Xylene Isomers		0.955	0.50
1,2-Xylene		1.04	0.50
1,2-Dichlorobenzene	95-50-1	N.D.<0.50	0.50
1,3-Dichlorobenzene	541-73-1	N.D.<0.50	0.50
1,4-Dichlorobenzene	106-46-7	N.D.<0.50	0.50

(1) MGS/KG = Milligrams/Kilogram (As Received), PPM
(2) PQL = Practical Quantitation Limit, PPM
(3) N.D. = Non-Detectable, less than concentration indicated

GC/MS REFERENCE # V009A26A.D

SURROGATE COMPOUND RECOVERY	MICROGRAMS ADDED	MICROGRAMS FOUND	%RECOVERY
Bromochloromethane	4.00	4.43	111
1,2-Dichloroethane D-4	4.00	3.89	97
1,4-Diflourobenzene	4.00	3.82	96
Fluorobenzene	4.00	4.04	101
Toluene D-8	4.00	4.75	119
2-Bromo-1-Chloropropane	4.00	5.31	133
Ethylbenzene D-10	4.00	3.62	91
1,4-Dichlorobutane	4.00	4.99	125
4-Bromofluorobenzene	4.00	3.69	92

NON-TARGET COMPOUNDS	CONCENTRATION MGS/KG (4)

NOT REQUESTED BY CLIENT

(4) Concentrated Estimated Using D-6 Benzene's Response Factor

Thomas Sabatino
C.A.L. Technologies Inc.

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR VOLATILE ORGANIC COMPOUND ANALYSIS

Volatile organic compounds are introduced into a gas chromatographic/ mass spectrometer system by either a purge and trap isolation system or by direct injection of liquid or gaseous sample (in limited applications). The organic compounds are separated by gas chromatography and detected by mass spectrometry, which is used to provide both qualitative and quantitative information.

If either purge and trap or direct sample introduction is not applicable to the sample matrix, a portion of the sample is dispersed in methanol to dissolve the volatile organic components; an aliquot of the methanol extract is added to reagent water and is subjected to the purge and trap technique and analyzed by gas chromatography/ mass spectrometry.

The purge and trap or dynamic head space procedure involves the use of and inert gas (Helium or Nitrogen) which is bubbled through the sample solution at ambient temperature, and the volatile components are transfered from the aqueous phase to the vapor phase. The vapor is swept onto a sorbent column where the volatile organic compounds are trapped. After purging is completed, the sorbent column is heated and backflushed with chromatographic column carrier gas to desorb the analytes onto the gas chromatographic column. The gas chromatorgaphic column is then heated so that the analyte compounds are separated, the separated components are then detected by a mass spectrometer.

Method 8240 is used to determine volatile organic compounds in a variety of solid waste matrices. This method is applicable to nearly all types of samples, regardless of water content, including ground water, aqueous sludges, caustic liquors, waste solvents, oily wastes, mousses, tars, fibrous wastes, polymeric emulsions, filter cakes, spent carbons, spent catalyst, soils and sediments.

Method 8240 can be used to quantify most volatile organic compounds that have boiling points below 200 C and that are insoluble or sightly in water. Volatile water-soluble compounds can be included in this analytical technique. However; for the more soluble compounds, quanttation limits are approximately ten to fifty times higher because of poor purging efficiency. The method is also limited to compounds which separate as sharp chromatographic components. Such compound classes include: low molecular weight halogenated hydrocarbons, aromatic hydrocarbons, ketones, nitriles, acetates, acrylates, ethers and mercaptans.

The practical quantitation limit (PQL) for Method 8240 for an individual (ideal) compound is approximately 5 ug/kg (PPB, wet weight) for soil/ sediment samples, 500 ug/kg (PPB, wet weight) for low level wastes and 5 ug/l (PPB) for ground water. PQLs will be proportionately higher for sample extracts and samples that require dilution or reduced sample size to avoid saturation of the analytical system.

Method 8240 is based on a purge and trap sample isolation procedure followed by gas chromatographic separation and mass spectrometry detection. This method is restricted to use by, or under the supervision of, analysts experienced in the use of purge and trap isolation systems and gas chromatographic/ mass spectrometry systems and skilled in the interpertation of spectra and their use as a quantitative tool.

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ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL, SEDIMENT, SLUDGE AND WASTE MATERIALS, METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY

FORM: VOAFORM8

CLIENT	WASTEX INDUSTRIES INC.	GC/MS REF#	V009A28A.D
SAMPLE #	871123.012	MATRIX	LIQUID WASTE
COLLECTED	11/17/87	DATE ANALYZED	11/30/87
C.A.L. #	87-889	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	12/12/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	200

COMPOUND	CAS #	CONCENTRATION MGS/KG (1)	PQL (2) MGS/KG
Chloromethane	74-87-3	N.D.<1.00	1.00
Bromomethane	74-83-9	N.D.<1.00	1.00
Vinyl Chloride	75-01-4	N.D.<1.00	1.00
Chloroethane	75-00-3	N.D.<1.00	1.00
Methylene Chloride	75-09-2	N.D.<0.50	0.50
Acetone	67-64-1	N.D.<10.0	10.0
Carbon Disulfide	75-15-0	N.D.<1.00	1.00
Trichlorofluoromethane	75-69-4	N.D.<0.50	0.50
Dichlorodifluoromethane		N.D.<0.50	0.50
1,1-Dichloroethene	75-35-4	N.D.<0.50	0.50
1,1-Dichloroethane	75-35-3	N.D.<0.50	0.50
trans-1,2-Dichloroethene	156-60-5	N.D.<0.50	0.50
Chloroform	67-66-3	N.D.<0.50	0.50
1,2-Dichloroethane	107-06-2	N.D.<0.50	0.50
2-Butanone	78-93-3	N.D.<10.0	10.0
1,1,1-Trichloroethane	75-55-6	N.D.<0.50	0.50
Carbon Tetrachloride	56-23-5	N.D.<0.50	0.50
Vinyl Acetate	108-05-4	N.D.<5.00	5.00
Bromodichloromethane	75-27-4	N.D.<0.50	0.50
1,2-Dichloropropane	78-87-5	N.D.<10.0	1.00
cis-1,3-Dichloropropene	10061-01-5	N.D.<10.0	1.00
Trichloroethene	79-01-6	N.D.<0.50	0.50
Benzene	71-43-2	N.D.<0.50	0.50
Dibromochloromethane	124-48-1	N.D.<0.50	0.50
1,1,2-Trichloroethane	79-00-5	N.D.<0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	N.D.<10.0	1.00
2-Chloroethylvinyl Ether	110-75-8	N.D.<10.0	1.00
Bromoform	75-25-2	N.D.<0.50	0.50
1,1,2,2-Tetrachloroethane	79-34-5	N.D.<0.50	0.50
Tetrachloroethene	127-18-4	N.D.<0.50	0.50
2-Hexanone	591-78-6	N.D.<5.00	5.00
4-Methyl-2-pentanone	108-10-1	N.D.<5.00	5.00
Toluene	108-88-3	18.8	0.50
Chlorobenzene	108-90-7	N.D.<0.50	0.50
Ethylbenzene	100-41-4	N.D.<0.50	0.50
Styrene	100-42-5	N.D.<0.50	0.50
1,3 + 1,4- Xylene Isomers		N.D.<0.50	0.50
1,2-Xylene		N.D.<0.50	0.50
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1,3-Dichlorobenzene	541-73-1	N.D.<0.50	0.50
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(2) PQL = Practical Quantitation Limit, PPM
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GC/MS REFERENCE # V009A28A.D

SURROGATE COMPOUND RECOVERY	MICROGRAMS ADDED	MICROGRAMS FOUND	%RECOVER
Bromochloromethane	40.00	44.76	11
1,2-Dichloroethane D-4	40.00	38.30	9
1,4-Diflourobenzene	40.00	38.82	9
Fluorobenzene	40.00	39.02	9
Toluene D-8	40.00	52.16	13
2-Bromo-1-Chloropropane	40.00	62.44	15
Ethylbenzene D-10	40.00	33.87	8
1,4-Dichlorobutane	40.00	47.80	12
4-Bromofluorobenzene	40.00	29.34	7

NON-TARGET COMPOUNDS	CONCENTRATION MGS/KG (4)

NOT REQUESTED BY CLIENT

(4) Concentrated Estimated Using D-6 Benzene's Response Factor

Thomas Sabatino
C.A.L. Technologies Inc.

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR VOLATILE ORGANIC COMPOUND ANALYSIS

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Method 8240 is used to determine volatile organic compounds in a variety of solid waste matrices. This method is applicable to nearly all types of samples, regardless of water content, including ground water, aqueous sludges, caustic liquors, waste solvents, oily wastes, mousses, tars, fibrous wastes, polymeric emulsions, filter cakes, spent carbons, spent catalyst, soils and sediments.

Method 8240 can be used to quantify most volatile organic compounds that have boiling points below 200 C and that are insoluble or sightly in water. Volatile water-soluble compounds can be included in this analytical technique. However; for the more soluble compounds, quanttation limits are approximately ten to fifty times higher because of poor purging efficiency. The method is also limited to compounds which separate as sharp chromatographic components. Such compound classes include: low molecular weight halogenated hydrocarbons, aromatic hydrocarbons, ketones, nitriles, acetates, acrylates, ethers and mercaptans.

The practical quantitation limit (PQL) for Method 8240 for an individual (ideal) compound is approximately 5 ug/kg (PPB, wet weight) for soil/ sediment samples, 500 ug/kg (PPB, wet weight) for low level wastes and 5 ug/l (PPB) for ground water. PQLs will be proportionately higher for sample extracts and samples that require dilution or reduced sample size to avoid saturation of the analytical system.

Method 8240 is based on a purge and trap sample isolation procedure followed by gas chromatographic separation and mass spectrometry detection. This method is restricted to use by, or under the supervision of, analysts experienced in the use of purge and trap isolation systems and gas chromatographic/ mass spectrometry systems and skilled in the interpertation of spectra and their use as a quantitative tool.

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ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL, SEDIMENT, SLUDGE AND WASTE MATERIALS, METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY

FORM: VOAFORM8

CLIENT	WASTEX INDUSTRIES INC.	GC/MS REF#	V009A21A.D
SAMPLE #	871123.013	MATRIX	LIQUID WASTE
COLLECTED	11/17/87	DATE ANALYZED	11/30/87
C.A.L. #	87-890	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	12/12/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	100

COMPOUND	CAS #	CONCENTRATION MGS/KG (1)	PQL (2) MGS/KG
Chloromethane	74-87-3	N.D.<1.00	1.00
Bromomethane	74-83-9	N.D.<1.00	1.00
Vinyl Chloride	75-01-4	N.D.<1.00	1.00
Chloroethane	75-00-3	70.7	1.00
Methylene Chloride	75-09-2	32.5	0.50
Acetone	67-64-1	N.D.<10.0	10.0
Carbon Disulfide	75-15-0	N.D.<1.00	1.00
Trichlorofluoromethane	75-69-4	N.D.<0.50	0.50
Dichlorodifluoromethane		N.D.<0.50	0.50
1,1-Dichloroethene	75-35-4	32.6	0.50
1,1-Dichloroethane	75-35-3	28.6	0.50
trans-1,2-Dichloroethene	156-60-5	1.50	0.50
Chloroform	67-66-3	178	0.50
1,2-Dichloroethane	107-06-2	520	0.50
2-Butanone	78-93-3	N.D.<10.0	10.0
1,1,1-Trichloroethane	75-55-6	458	0.50
Carbon Tetrachloride	56-23-5	0.48	0.50
Vinyl Acetate	108-05-4	N.D.<5.00	5.00
Bromodichloromethane	75-27-4	0.58	0.50
1,2-Dichloropropane	78-87-5	N.D.<10.0	1.00
cis-1,3-Dichloropropene	10061-01-5	0.78	1.00
Trichloroethene	79-01-6	3.06	0.50
Benzene	71-43-2	481	0.50
Dibromochloromethane	124-48-1	N.D.<0.50	0.50
1,1,2-Trichloroethane	79-00-5	N.D.<0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	N.D.<10.0	1.00
2-Chloroethylvinyl Ether	110-75-8	N.D.<10.0	1.00
Bromoform	75-25-2	N.D.<0.50	0.50
1,1,2,2-Tetrachloroethane	79-34-5	1.15	0.50
Tetrachloroethene	127-18-4	295	0.50
2-Hexanone	591-78-6	N.D.<5.00	5.00
4-Methyl-2-pentanone	108-10-1	N.D.<5.00	5.00
Toluene	108-88-3	115	0.50
Chlorobenzene	108-90-7	2.41	0.50
Ethylbenzene	100-41-4	210	0.50
Styrene	100-42-5	N.D.<0.50	0.50
1,3 + 1,4- Xylene Isomers		N.D.<0.50	0.50
1,2-Xylene		N.D.<0.50	0.50
1,2-Dichlorobenzene	95-50-1	N.D.<0.50	0.50
1,3-Dichlorobenzene	541-73-1	N.D.<0.50	0.50
1,4-Dichlorobenzene	106-46-7	N.D.<0.50	0.50

(1) MGS/KG = Milligrams/Kilogram (As Received), PPM
(2) PQL = Practical Quantitation Limit, PPM
(3) N.D. = Non-Detectable, less than concentration indicated

GC/MS REFERENCE # V009A21A.D

SURROGATE COMPOUND RECOVERY	MICROGRAMS ADDED	MICROGRAMS FOUND	%RECOVERY
Bromochloromethane	4.00	5.28	132
1,2-Dichloroethane D-4	4.00	2.11	53
1,4-Diflourobenzene	4.00	4.32	108
Fluorobenzene	4.00	4.32	108
Toluene D-8	4.00	5.95	149
2-Bromo-1-Chloropropane	4.00	7.12	178
Ethylbenzene D-10	4.00	3.24	81
1,4-Dichlorobutane	4.00	13.11	328
4-Bromofluorobenzene	4.00	23.58	590

NON-TARGET COMPOUNDS	CONCENTRATION MGS/KG (4)

NOT REQUESTED BY CLIENT

(4) Concentrated Estimated Using D-6 Benzene's Response Factor

Thomas Sabatino
C.A.L. Technologies Inc.

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR VOLATILE ORGANIC COMPOUND ANALYSIS

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Method 8240 is used to determine volatile organic compounds in a variety of solid waste matrices. This method is applicable to nearly all types of samples, regardless of water content, including ground water, aqueous sludges, caustic liquors, waste solvents, oily wastes, mousses, tars, fibrous wastes, polymeric emulsions, filter cakes, spent carbons, spent catalyst, soils and sediments.

Method 8240 can be used to quantify most volatile organic compounds that have boiling points below 200 C and that are insoluble or sightly in water. Volatile water-soluble compounds can be included in this analytical technique. However; for the more soluble compounds, quanttation limits are approximately ten to fifty times higher because of poor purging efficiency. The method is also limited to compounds which separate as sharp chromatographic components. Such compound classes include: low molecular weight halogenated hydrocarbons, aromatic hydrocarbons, ketones, nitriles, acetates, acrylates, ethers and mercaptans.

The practical quantitation limit (PQL) for Method 8240 for an individual (ideal) compound is approximately 5 ug/kg (PPB, wet weight) for soil/ sediment samples, 500 ug/kg (PPB, wet weight) for low level wastes and 5 ug/l (PPB) for ground water. PQLs will be proportionately higher for sample extracts and samples that require dilution or reduced sample size to avoid saturation of the analytical system.

Method 8240 is based on a purge and trap sample isolation procedure followed by gas chromatographic separation and mass spectrometry detection. This method is restricted to use by, or under the supervision of, analysts experienced in the use of purge and trap isolation systems and gas chromatographic/ mass spectrometry systems and skilled in the interpertation of spectra and their use as a quantitative tool.

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ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL, SEDIMENT, SLUDGE AND WASTE MATERIALS, METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY

FORM: VOAFORM8

CLIENT	WASTEX INDUSTRIES INC.	GC/MS REF#	V009A27A.D
SAMPLE #	871123.017	MATRIX	LIQUID WASTE
COLLECTED	11/18/87	DATE ANALYZED	11/30/87
C.A.L. #	87-823	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	12/12/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	100

COMPOUND	CAS #	CONCENTRATION MGS/KG (1)	PQL (2) MGS/KG
Chloromethane	74-87-3	N.D.<1.00	1.00
Bromomethane	74-83-9	N.D.<1.00	1.00
Vinyl Chloride	75-01-4	N.D.<1.00	1.00
Chloroethane	75-00-3	N.D.<1.00	1.00
Methylene Chloride	75-09-2	N.D.<0.50	0.50
Acetone	67-64-1	N.D.<10.0	10.0
Carbon Disulfide	75-15-0	N.D.<1.00	1.00
Trichlorofluoromethane	75-69-4	N.D.<0.50	0.50
Dichlorodifluoromethane		N.D.<0.50	0.50
1,1-Dichloroethene	75-35-4	N.D.<0.50	0.50
1,1-Dichloroethane	75-35-3	N.D.<0.50	0.50
trans-1,2-Dichloroethene	156-60-5	N.D.<0.50	0.50
Chloroform	67-66-3	N.D.<0.50	0.50
1,2-Dichloroethane	107-06-2	N.D.<0.50	0.50
2-Butanone	78-93-3	N.D.<10.0	10.0
1,1,1-Trichloroethane	75-55-6	N.D.<0.50	0.50
Carbon Tetrachloride	56-23-5	N.D.<0.50	0.50
Vinyl Acetate	108-05-4	N.D.<5.00	5.00
Bromodichloromethane	75-27-4	N.D.<0.50	0.50
1,2-Dichloropropane	78-87-5	N.D.<10.0	1.00
cis-1,3-Dichloropropene	10061-01-5	N.D.<10.0	1.00
Trichloroethene	79-01-6	N.D.<0.50	0.50
Benzene	71-43-2	N.D.<0.50	0.50
Dibromochloromethane	124-48-1	N.D.<0.50	0.50
1,1,2-Trichloroethane	79-00-5	N.D.<0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	N.D.<10.0	1.00
2-Chloroethylvinyl Ether	110-75-8	N.D.<10.0	1.00
Bromoform	75-25-2	N.D.<0.50	0.50
1,1,2,2-Tetrachloroethane	79-34-5	N.D.<0.50	0.50
Tetrachloroethene	127-18-4	N.D.<0.50	0.50
2-Hexanone	591-78-6	N.D.<5.00	5.00
4-Methyl-2-pentanone	108-10-1	N.D.<5.00	5.00
Toluene	108-88-3	1.16	0.50
Chlorobenzene	108-90-7	N.D.<0.50	0.50
Ethylbenzene	100-41-4	0.771	0.50
Styrene	100-42-5	N.D.<0.50	0.50
1,3 + 1,4- Xylene Isomers		4.94	0.50
1,2-Xylene		11.0	0.50
1,2-Dichlorobenzene	95-50-1	N.D.<0.50	0.50
1,3-Dichlorobenzene	541-73-1	N.D.<0.50	0.50
1,4-Dichlorobenzene	106-46-7	N.D.<0.50	0.50

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GC/MS REFERENCE # V009A27A.D

SURROGATE COMPOUND RECOVERY	MICROGRAMS ADDED	MICROGRAMS FOUND	%RECOVERY
Bromochloromethane	4.00	3.13	78
1,2-Dichloroethane D-4	4.00	2.77	69
1,4-Diflourobenzene	4.00	4.17	104
Fluorobenzene	4.00	4.19	105
Toluene D-8	4.00	4.32	108
2-Bromo-1-Chloropropane	4.00	3.87	97
Ethylbenzene D-10	4.00	4.52	113
1,4-Dichlorobutane	4.00	3.42	85
4-Bromofluorobenzene	4.00	4.38	110

NON-TARGET COMPOUNDS	CONCENTRATION MGS/KG (4)

NOT REQUESTED BY CLIENT

(4) Concentrated Estimated Using D-6 Benzene's Response Factor

Thomas Sabatino
C.A.L. Technologies Inc.

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Method 8240 is used to determine volatile organic compounds in a variety of solid waste matrices. This method is applicable to nearly all types of samples, regardless of water content, including ground water, aqueous sludges, caustic liquors, waste solvents, oily wastes, mousses, tars, fibrous wastes, polymeric emulsions, filter cakes, spent carbons, spent catalyst, soils and sediments.

Method 8240 can be used to quantify most volatile organic compounds that have boiling points below 200 C and that are insoluble or sightly in water. Volatile water-soluble compounds can be included in this analytical technique. However; for the more soluble compounds, quanttation limits are approximately ten to fifty times higher because of poor purging efficiency. The method is also limited to compounds which separate as sharp chromatographic components. Such compound classes include: low molecular weight halogenated hydrocarbons, aromatic hydrocarbons, ketones, nitriles, acetates, acrylates, ethers and mercaptans.

The practical quantitation limit (PQL) for Method 8240 for an individual (ideal) compound is approximately 5 ug/kg (PPB, wet weight) for soil/ sediment samples, 500 ug/kg (PPB, wet weight) for low level wastes and 5 ug/l (PPB) for ground water. PQLs will be proportionately higher for sample extracts and samples that require dilution or reduced sample size to avoid saturation of the analytical system.

Method 8240 is based on a purge and trap sample isolation procedure followed by gas chromatographic separation and mass spectrometry detection. This method is restricted to use by, or under the supervision of, analysts experienced in the use of purge and trap isolation systems and gas chromatographic/ mass spectrometry systems and skilled in the interpertation of spectra and their use as a quantitative tool.

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL, SEDIMENT, SLUDGE AND WASTE MATERIALS, METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: VOAFORM8

CLIENT	WASTEX INDUSTRIES INC.	GC/MS REF#	V009A29A.D
SAMPLE #	871123.018	MATRIX	WASTE SLUDGE
COLLECTED	11/18/87	DATE ANALYZED	11/30/87
C.A.L. #	87-824	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	12/12/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	57.8

COMPOUND	CAS #	CONCENTRATION MGS/KG (1)	PQL (2) MGS/KG
Chloromethane	74-87-3	N.D.<1.00	1.00
Bromomethane	74-83-9	N.D.<1.00	1.00
Vinyl Chloride	75-01-4	N.D.<1.00	1.00
Chloroethane	75-00-3	N.D.<1.00	1.00
Methylene Chloride	75-09-2	N.D.<1.00	0.50
Acetone	67-64-1	N.D.<10.0	10.0
Carbon Disulfide	75-15-0	N.D.<1.00	1.00
Trichlorofluoromethane	75-69-4	N.D.<0.50	0.50
Dichlorodifluoromethane		N.D.<0.50	0.50
1,1-Dichloroethene	75-35-4	N.D.<0.50	0.50
1,1-Dichloroethane	75-35-3	N.D.<0.50	0.50
trans-1,2-Dichloroethene	156-60-5	N.D.<0.50	0.50
Chloroform	67-66-3	N.D.<0.50	0.50
1,2-Dichloroethane	107-06-2	N.D.<0.50	0.50
2-Butanone	78-93-3	N.D.<10.0	10.0
1,1,1-Trichloroethane	75-55-6	N.D.<0.50	0.50
Carbon Tetrachloride	56-23-5	N.D.<0.50	0.50
Vinyl Acetate	108-05-4	N.D.<5.00	5.00
Bromodichloromethane	75-27-4	N.D.<0.50	0.50
1,2-Dichloropropane	78-87-5	N.D.<10.0	1.00
cis-1,3-Dichloropropene	10061-01-5	N.D.<10.0	1.00
Trichloroethene	79-01-6	N.D.<0.50	0.50
Benzene	71-43-2	N.D.<0.50	0.50
Dibromochloromethane	124-48-1	N.D.<0.50	0.50
1,1,2-Trichloroethane	79-00-5	N.D.<0.50	0.50
trans-1,3-Dichloropropene	10061-02-6	4.18	1.00
2-Chloroethylvinyl Ether	110-75-8	N.D.<10.0	1.00
Bromoform	75-25-2	N.D.<0.50	0.50
1,1,2,2-Tetrachloroethane	79-34-5	N.D.<0.50	0.50
Tetrachloroethene	127-18-4	N.D.<0.50	0.50
2-Hexanone	591-78-6	N.D.<5.00	5.00
4-Methyl-2-pentanone	108-10-1	N.D.<5.00	5.00
Toluene	108-88-3	0.593	0.50
Chlorobenzene	108-90-7	N.D.<0.50	0.50
Ethylbenzene	100-41-4	N.D.<0.50	0.50
Styrene	100-42-5	N.D.<0.50	0.50
1,3 + 1,4- Xylene Isomers		N.D.<0.50	0.50
1,2-Xylene		N.D.<0.50	0.50
1,2-Dichlorobenzene	95-50-1	N.D.<0.50	0.50
1,3-Dichlorobenzene	541-73-1	N.D.<0.50	0.50
1,4-Dichlorobenzene	106-46-7	N.D.<0.50	0.50

(1) MGS/KG = Milligrams/Kilogram (As Received), PPM
(2) PQL = Practical Quantitation Limit, PPM
(3) N.D. = Non-Detectable, less than concentration indicated

GC/MS REFERENCE # V009A29A.D

SURROGATE COMPOUND RECOVERY	MICROGRAMS ADDED	MICROGRAMS FOUND	%RECOVERY
Bromochloromethane	4.00	3.18	80
1,2-Dichloroethane D-4	4.00	2.92	73
1,4-Diflourobenzene	4.00	4.04	101
Fluorobenzene	4.00	4.00	100
Toluene D-8	4.00	4.53	113
2-Bromo-1-Chloropropane	4.00	4.72	118
Ethylbenzene D-10	4.00	4.29	107
1,4-Dichlorobutane	4.00	3.71	93
4-Bromofluorobenzene	4.00	3.58	90

NON-TARGET COMPOUNDS	CONCENTRATION MGS/KG (4)

NOT REQUESTED BY CLIENT

(4) Concentrated Estimated Using D-6 Benzene's Response Factor

Thomas Sabatino
C.A.L. Technologies Inc.

GC/MS REFERENCE # V009A29A.D

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR VOLATILE ORGANIC COMPOUND ANALYSIS

Volatile organic compounds are introduced into a gas chromatographic/ mass spectrometer system by either a purge and trap isolation system or by direct injection of liquid or gaseous sample (in limited applications). The organic compounds are separated by gas chromatography and detected by mass spectrometry, which is used to provide both qualitative and quantitative information.

If either purge and trap or direct sample introduction is not applicable to the sample matrix, a portion of the sample is dispersed in methanol to dissolve the volatile organic components; an aliquot of the methanol extract is added to reagent water and is subjected to the purge and trap technique and analyzed by gas chromatography/ mass spectrometry.

The purge and trap or dynamic head space procedure involves the use of and inert gas (Helium or Nitrogen) which is bubbled through the sample solution at ambient temperature, and the volatile components are transfered from the aqueous phase to the vapor phase. The vapor is swept onto a sorbent column where the volatile organic compounds are trapped. After purging is completed, the sorbent column is heated and backflushed with chromatographic column carrier gas to desorb the analytes onto the gas chromatographic column. The gas chromatorgaphic column is then heated so that the analyte compounds are separated, the separated components are then detected by a mass spectrometer.

Method 8240 is used to determine volatile organic compounds in a variety of solid waste matrices. This method is applicable to nearly all types of samples, regardless of water content, including ground water, aqueous sludges, caustic liquors, waste solvents, oily wastes, mousses, tars, fibrous wastes, polymeric emulsions, filter cakes, spent carbons, spent catalyst, soils and sediments.

Method 8240 can be used to quantify most volatile organic compounds that have boiling points below 200 C and that are insoluble or sightly in water. Volatile water-soluble compounds can be included in this analytical technique. However; for the more soluble compounds, quanttation limits are approximately ten to fifty times higher because of poor purging efficiency. The method is also limited to compounds which separate as sharp chromatographic components. Such compound classes include: low molecular weight halogenated hydrocarbons, aromatic hydrocarbons, ketones, nitriles, acetates, acrylates, ethers and mercaptans.

The practical quantitation limit (PQL) for Method 8240 for an individual (ideal) compound is approximately 5 ug/kg (PPB, wet weight) for soil/ sediment samples, 500 ug/kg (PPB, wet weight) for low level wastes and 5 ug/l (PPB) for ground water. PQLs will be proportionately higher for sample extracts and samples that require dilution or reduced sample size to avoid saturation of the analytical system.

Method 8240 is based on a purge and trap sample isolation procedure followed by gas chromatographic separation and mass spectrometry detection. This method is restricted to use by, or under the supervision of, analysts experienced in the use of purge and trap isolation systems and gas chromatographic/ mass spectrometry systems and skilled in the interpertation of spectra and their use as a quantitative tool.

SECTION 2.0
LABORATORY CHRONICLE AND ANALYTICAL REPORTS FOR THE ANALYSIS OF FORTIFIED DUPLICATE WASTE SAMPLES, VOLATILE ORGANIC COMPOUNDS

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT BY USEPA METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY, FORM VOAFORM4

RESULTS OF FORTIFIED DUPLICATE ANALYSIS

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871120.045	DATE ANALYZED	11/30/87
C.A.L. #	87-821S	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	2/12/87
GC/MS REF#	V009A24A.D	% SOLIDS	SEE NOTE #1
		DILUTION FACTOR	100

COMPOUND	CONCENTRATION UG ADDED	FOUND	%RECOVERY
1,1-Dichloroethene	1.00	1.25	125
Benzene	1.00	.73	7[illegible]
Trichloroethene	1.00	.37	3[illegible]
Toluene	1.00	.13	1[illegible]
Chlorobenzene	1.00	1.04	10[illegible]

SURROGATE COMPOUND RECOVERY	UGS ADDED	% RECOVERY
Bromochloromethane	4.00	127
1,2-Dichloroethane D4	4.00	121
1,4-Difluorobenzene	4.00	89
Fluorobenzene	4.00	93
Toluene D8	4.00	119
2-Bromo-1-Chloropropane	4.00	138
Ethylbenzene D10	4.00	87
1,4-Dichlorobutane	4.00	112
4-Bromofluorobenzene	4.00	103

1) CONCENTRATION CALCULATED ON AS RECEIVED BASIS

Thomas Sabatino
C.A.L. Technologies Inc.

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
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ANALYSIS OF VOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT BY USEPA METHOD 8240, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY, FORM VOAFORM4

RESULTS OF FORTIFIED DUPLICATE ANALYSIS

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871120.045	DATE ANALYZED	11/30/87
C.A.L. #	87-821DS	ANALYST	SABATINO
DATE REC.	11/24/87	REPORT DATE	2/12/87
GC/MS REF#	V009A25A.D	% SOLIDS	SEE NOTE #1
		DILUTION FACTOR	100

COMPOUND	CONCENTRATION UG ADDED	FOUND	%RECOVERY
1.1-Dichloroethene	1.00	1.41	14[illegible]
Benzene	1.00	1.07	10[illegible]
Trichloroethene	1.00	.32	3[illegible]
Toluene	1.00	1.76	17[illegible]
Chlorobenzene	1.00	1.08	10[illegible]

SURROGATE COMPOUND RECOVERY	UGS ADDED	% RECOVERY
Bromochloromethane	4.00	140
1,2-Dichloroethane D4	4.00	125
1,4-Difluorobenzene	4.00	88
Fluorobenzene	4.00	90
Toluene D8	4.00	130
2-Bromo-1-Chloropropane	4.00	154
Ethylbenzene D10	4.00	92
1,4-Dichlorobutane	4.00	118
4-Bromofluorobenzene	4.00	108

1) CONCENTRATION CALCULATED ON AS RECEIVED BASIS

Thomas Sabatino
C.A.L. Technologies Inc.

SECTION 3.0

TOTAL ION CHROMATOGRAMS FOR STANDARDS, SAMPLES, FORTIFIED DUPLICATES AND BLANKS, VOLATILE ORGANIC COMPOUND ANALYSES

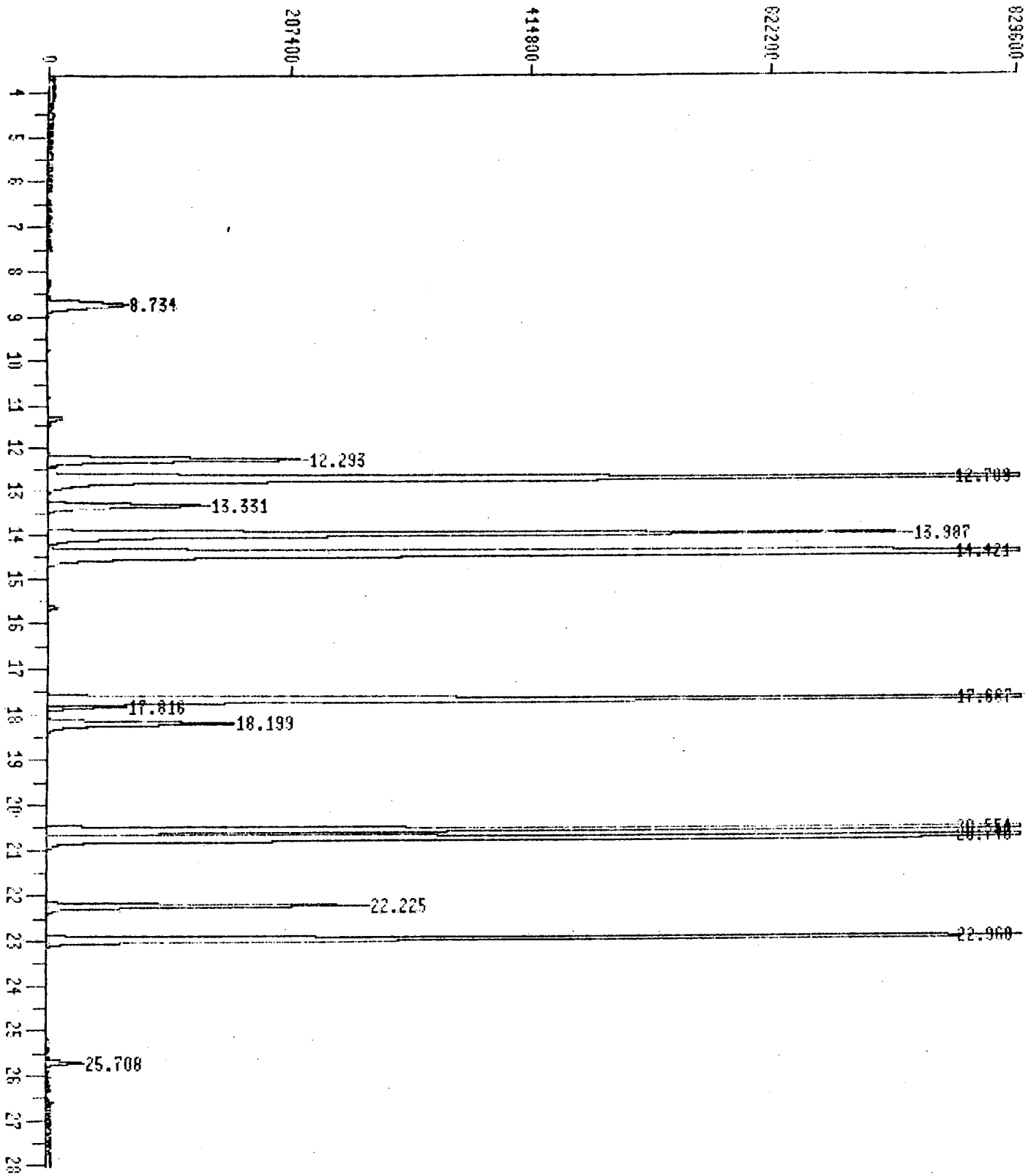
Data file: DATA:V009A15A.D
File type: GC / MS DATA FILE

Name Info: BLANK WATER 10/30/87 5.0 MLS + 100 PPB ISS
Misc Info: 1600EMV 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 4:11 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A15A.D



End of plot. Time = 3.63 to 28.01 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A15A.D
BLANK WATER 10/30/87 5.0 MLS + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.734	BH	0.149	6569641	8.593	8.914
2	12.293	PH	0.110	15060627	12.166	12.479
3	12.709	BH	0.113	64734388	12.532	13.055
4	13.331	BH	0.102	8556103	13.215	13.504
5	13.987	BH	0.105	49023737	13.813	14.230
6	14.421	PH	0.099	107568935	14.230	14.721
7	17.667	BV	0.085	64144697	17.528	17.795
8	17.816	VB	0.069	2828928	17.795	17.934
9	18.199	BB	0.090	9499130	18.030	18.403
10	20.554	BV	0.081	50689237	20.367	20.647
11	20.740	VB	0.086	84054877	20.647	20.987
12	22.225	BB	0.078	13377904	22.075	22.396
13	22.968	BB	0.080	45071340	22.780	23.143
14	25.708	PB	0.061	1314566	25.625	25.790

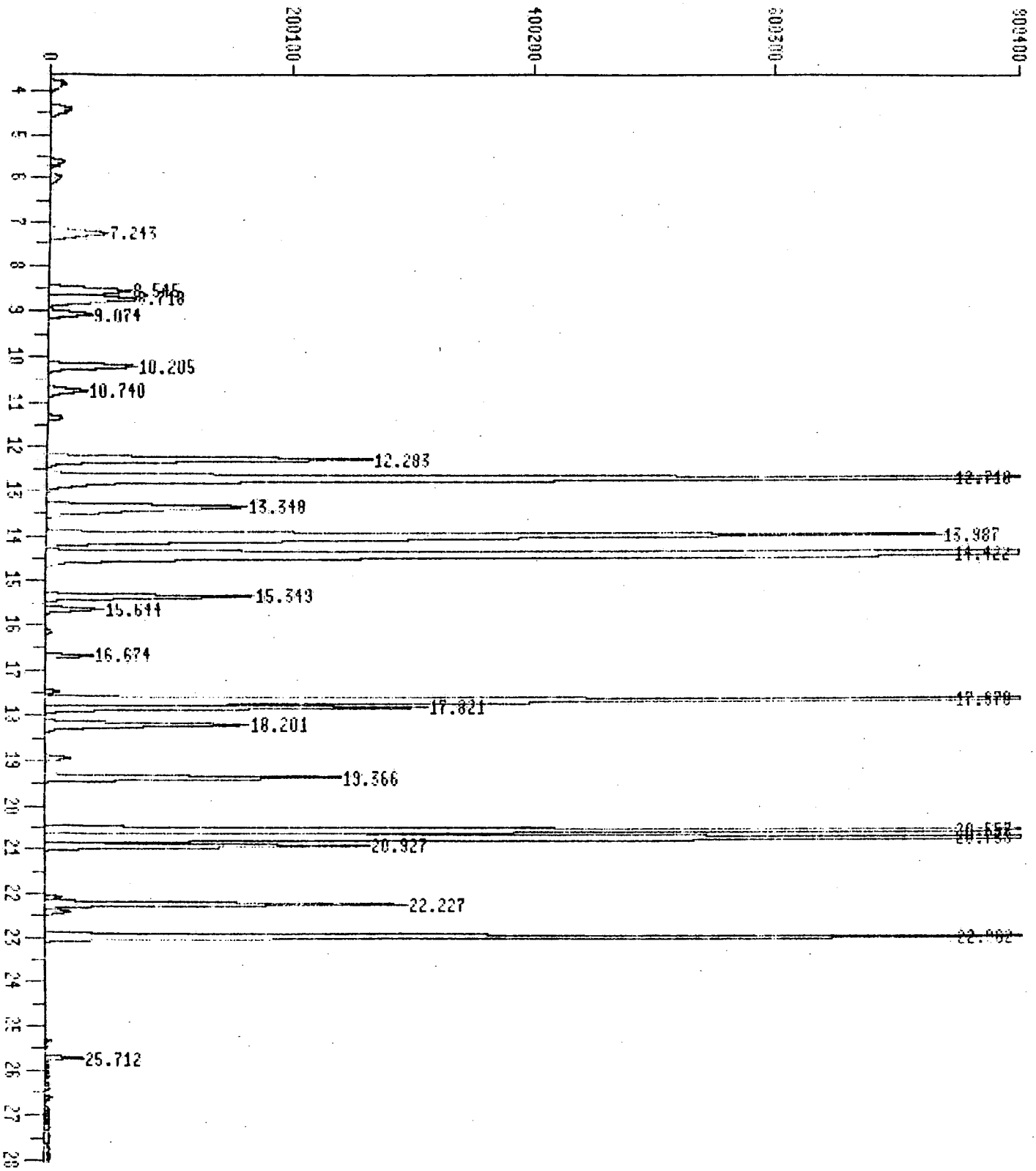
Data file: DATA:V009A16A.D
File type: GC / MS DATA FILE

Name Info: VOLATILE STANDARD 16.7 PPB@ + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 4:45 pm
Instrment: MS 5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A16A.D



End of plot. Time = 3.63 to 28.02 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A16A.D
VOLATILE STANDARD 16.7 PPB@ + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.243	BB	0.136	5034124	7.100	7.432
2	8.545	BV	0.120	5454712	8.403	8.632
3	8.718	VV	0.138	7327804	8.632	8.905
4	9.074	PH	0.091	2438443	8.905	9.172
5	10.205	BH	0.125	5096152	10.069	10.347
6	10.740	BH	0.104	2324622	10.614	10.902
7	12.283	BH	0.114	18843264	12.087	12.483
8	12.710	BH	0.110	62658851	12.557	13.038
9	13.348	BH	0.143	15798524	13.219	13.615
10	13.987	BH	0.127	64345179	13.839	14.282
11	14.422	PH	0.099	104005247	14.282	14.704
12	15.349	BH	0.085	9720666	15.248	15.473
13	15.644	BH	0.079	2508401	15.547	15.772
14	16.674	BH	0.074	1883908	16.594	16.776
15	17.670	PH	0.085	61813629	17.542	17.761
16	17.821	VH	0.088	16861298	17.761	17.982
17	18.201	BH	0.084	9989685	18.078	18.388
18	19.366	BH	0.084	12554607	19.210	19.477
19	20.557	BH	0.088	56207406	20.385	20.651
20	20.738	VH	0.090	82622591	20.651	20.850
21	20.927	VH	0.084	13930489	20.850	21.058
22	22.227	VH	0.079	14502877	22.127	22.336
23	22.962	BH	0.078	44188614	22.809	23.108
24	25.712	BH	0.062	1222089	25.639	25.799

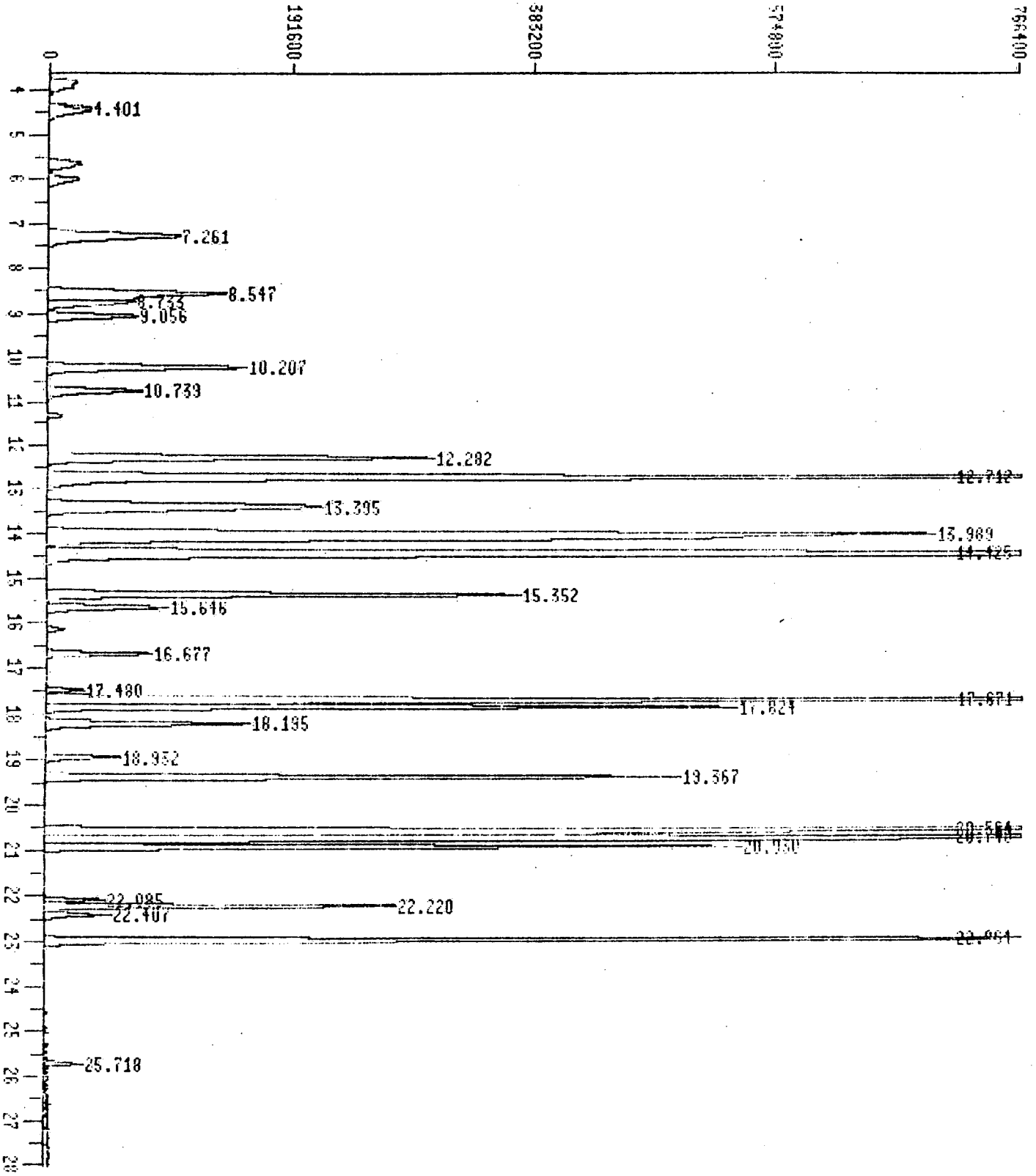
Data file: DATA:V009A17A.D
File type: GC / MS DATA FILE

Name Info: VOLATILE STANDARD 33.4 PPB@ + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 5:20 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A17A.D



End of plot. Time = 3.63 to 28.00 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A17A.D
VOLATILE STANDARD 33.4 PPB@ + 100 PPB ISS

Peak#	Ret. Time	Type	Width	Area	Start Time	End Time
1	4.401	BV	0.099	860096	4.281	4.464
2	7.261	BH	0.167	11418808	7.080	7.518
3	8.547	BH	0.133	13674547	8.404	8.704
4	8.733	VH	0.122	4998984	8.704	8.928
5	9.056	PH	0.126	5368027	8.928	9.216
6	10.207	BH	0.108	10975491	10.060	10.391
7	10.739	BH	0.106	5668249	10.615	10.968
8	12.282	BH	0.118	22491686	12.090	12.485
9	12.712	BH	0.106	59304134	12.570	13.040
10	13.395	BH	0.182	23931088	13.222	13.617
11	13.989	BH	0.149	77191193	13.809	14.285
12	14.425	PH	0.101	97622389	14.285	14.717
13	15.352	BH	0.096	22652144	15.230	15.508
14	15.646	PH	0.095	5636356	15.508	15.807
15	16.677	BH	0.094	4521573	16.586	16.789
16	17.480	BH	0.070	1333145	17.398	17.546
17	17.671	PH	0.092	57240636	17.546	17.758
18	17.824	VH	0.085	30313508	17.758	17.986
19	18.195	BH	0.096	9445118	18.082	18.370
20	18.932	BH	0.084	3229189	18.744	19.054
21	19.367	BH	0.084	26613860	19.257	19.502
22	20.564	BH	0.094	61988832	20.432	20.661
23	20.740	VH	0.086	78391525	20.661	20.846
24	20.930	VH	0.086	28062682	20.846	21.062
25	22.085	BH	0.068	2007374	21.991	22.133
26	22.220	VH	0.083	14023889	22.133	22.325
27	22.407	VH	0.104	2568973	22.325	22.536
28	22.964	BH	0.076	41361138	22.846	23.113
29	25.718	BV	0.052	1028667	25.644	25.762

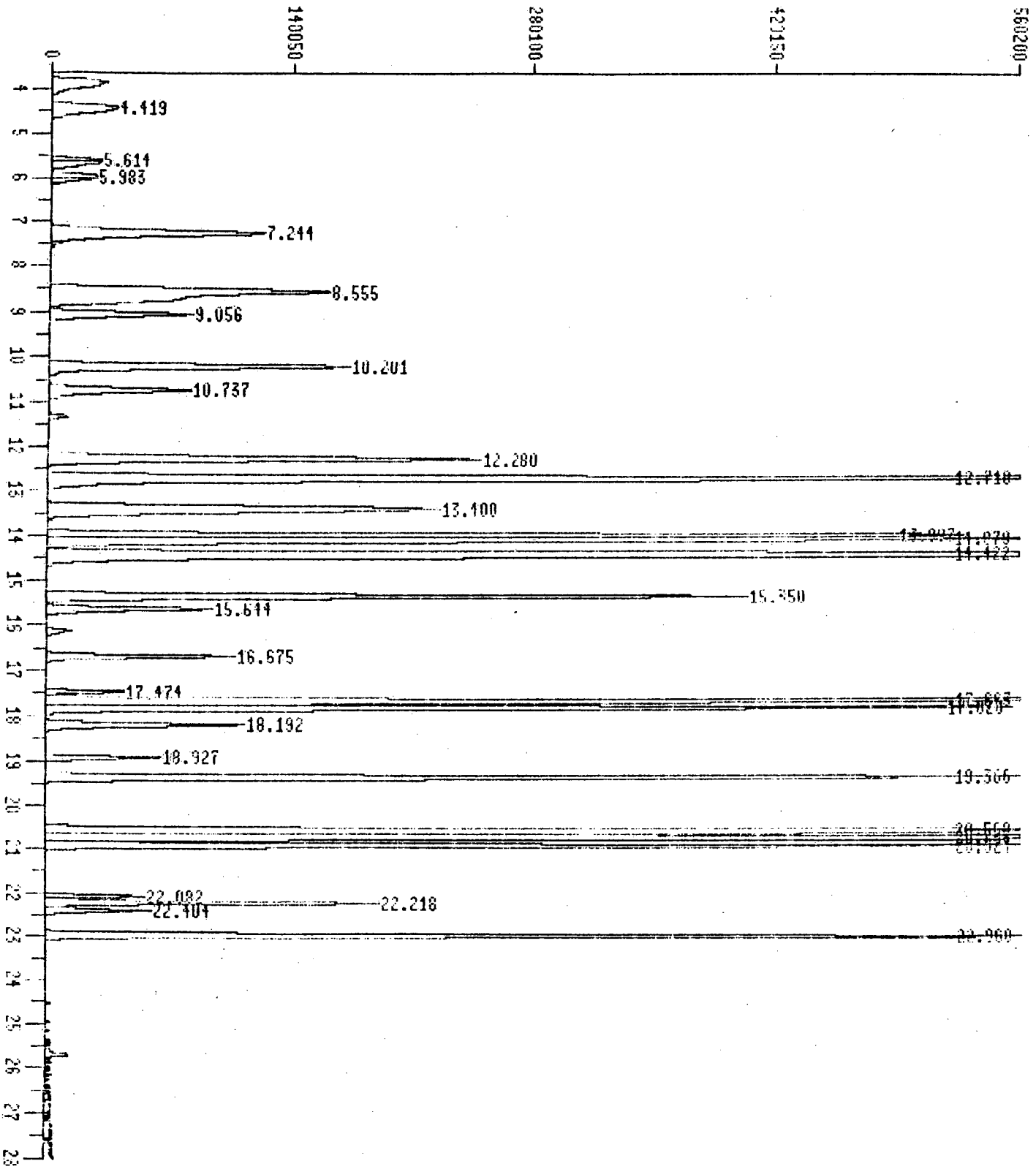
Data file: DATA:V009A18A.D
File type: GC / MS DATA FILE

Name Info: VOLATILE STANDARD 50.1 PPB@ + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 5:58 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A18A.D



End of plot, Time = 3.63 to 28.00 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A18A.D
VOLATILE STANDARD 50.1 PPB@ + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.419	BB	0.187	4953849	4.281	4.677
2	5.614	BH	0.081	1386920	5.520	5.643
3	5.983	BH	0.098	1645660	5.841	6.024
4	7.244	BH	0.148	13528388	7.058	7.498
5	8.555	BH	0.192	22011731	8.404	8.917
6	9.056	PH	0.106	6207916	8.917	9.237
7	10.201	BH	0.117	12582544	10.081	10.433
8	10.737	BH	0.124	6479394	10.593	10.946
9	12.280	BH	0.116	18858763	12.056	12.462
10	12.710	BH	0.108	47350792	12.548	12.996
11	13.400	BH	0.135	23434416	13.188	13.658
12	13.997	BH	0.093	29220414	13.840	14.031
13	14.079	VH	0.109	40116731	14.031	14.293
14	14.422	VH	0.102	72857706	14.293	14.716
15	15.350	BH	0.096	24322292	15.175	15.506
16	15.644	PH	0.093	5547794	15.506	15.784
17	16.675	BH	0.083	5746301	16.585	16.830
18	17.474	BH	0.070	1974071	17.396	17.544
19	17.663	VH	0.088	42047798	17.544	17.746
20	17.820	VH	0.086	31927924	17.746	18.005
21	18.192	BH	0.090	6535503	18.080	18.347
22	18.927	BH	0.080	3432135	18.785	19.030
23	19.366	BH	0.084	29638978	19.180	19.500
24	20.560	BH	0.108	50479096	20.429	20.664
25	20.736	VH	0.085	56475413	20.664	20.841
26	20.924	VH	0.081	30776330	20.841	21.059
27	22.082	BH	0.070	2473301	21.989	22.134
28	22.218	VH	0.076	9566338	22.134	22.320
29	22.404	VH	0.068	2806656	22.320	22.512
30	22.960	BH	0.075	28812751	22.843	23.089

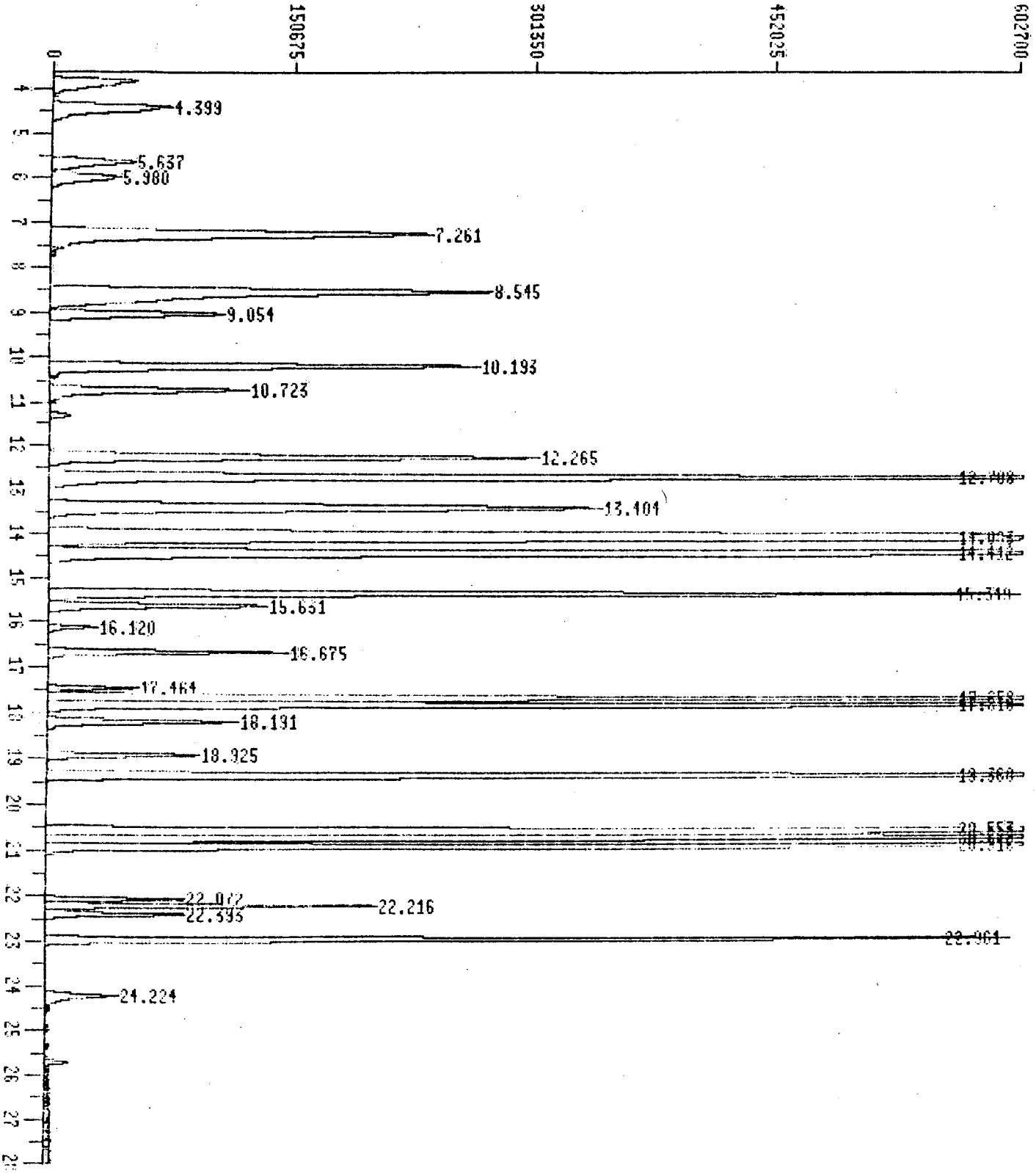
Data file: DATA:V009A19A.D
File type: GC / MS DATA FILE

Name Info: VOLATILE STANDARD 66.7 PPB@ + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 6:38 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A19A.D



End of plot. Time = 3.63 to 28.01 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A19A.D
VOLATILE STANDARD 66.7 PPB@ + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.399	BB	0.150	8770846	4.260	4.719
2	5.637	BV	0.145	5049727	5.499	5.841
3	5.980	PH	0.131	4389533	5.841	6.215
4	7.261	BH	0.179	25825150	7.080	7.563
5	8.545	BH	0.169	31882405	8.383	8.926
6	9.054	PH	0.126	8756606	8.926	9.217
7	10.193	BH	0.109	18993906	10.018	10.403
8	10.723	BH	0.111	9487320	10.595	10.974
9	12.265	BH	0.115	23067886	12.058	12.486
10	12.708	PH	0.108	52583710	12.486	12.998
11	13.404	BH	0.159	34748094	13.223	13.661
12	14.083	BH	0.155	92117224	13.842	14.292
13	14.412	VH	0.100	77506965	14.292	14.676
14	15.349	BH	0.092	36690262	15.231	15.530
15	15.631	PH	0.096	8259460	15.530	15.808
16	16.120	BH	0.078	1361820	16.000	16.257
17	16.675	BH	0.081	7629137	16.566	16.833
18	17.464	BH	0.074	2624508	17.378	17.546
19	17.658	VH	0.083	44635415	17.546	17.740
20	17.810	VH	0.093	45495933	17.740	18.009
21	18.191	BH	0.090	6863865	18.083	18.372
22	18.925	BH	0.089	5069975	18.756	19.055
23	19.360	BH	0.091	47166105	19.237	19.504
24	20.553	BH	0.111	58020305	20.434	20.661
25	20.729	VH	0.087	60929895	20.661	20.829
26	20.916	VH	0.079	46629123	20.829	21.085
27	22.072	BH	0.076	4176312	21.972	22.137
28	22.216	VH	0.078	10001799	22.137	22.307
29	22.393	VH	0.081	4612699	22.307	22.517
30	22.961	BH	0.083	30031904	22.848	23.094
31	24.224	BH	0.103	3245159	24.087	24.441

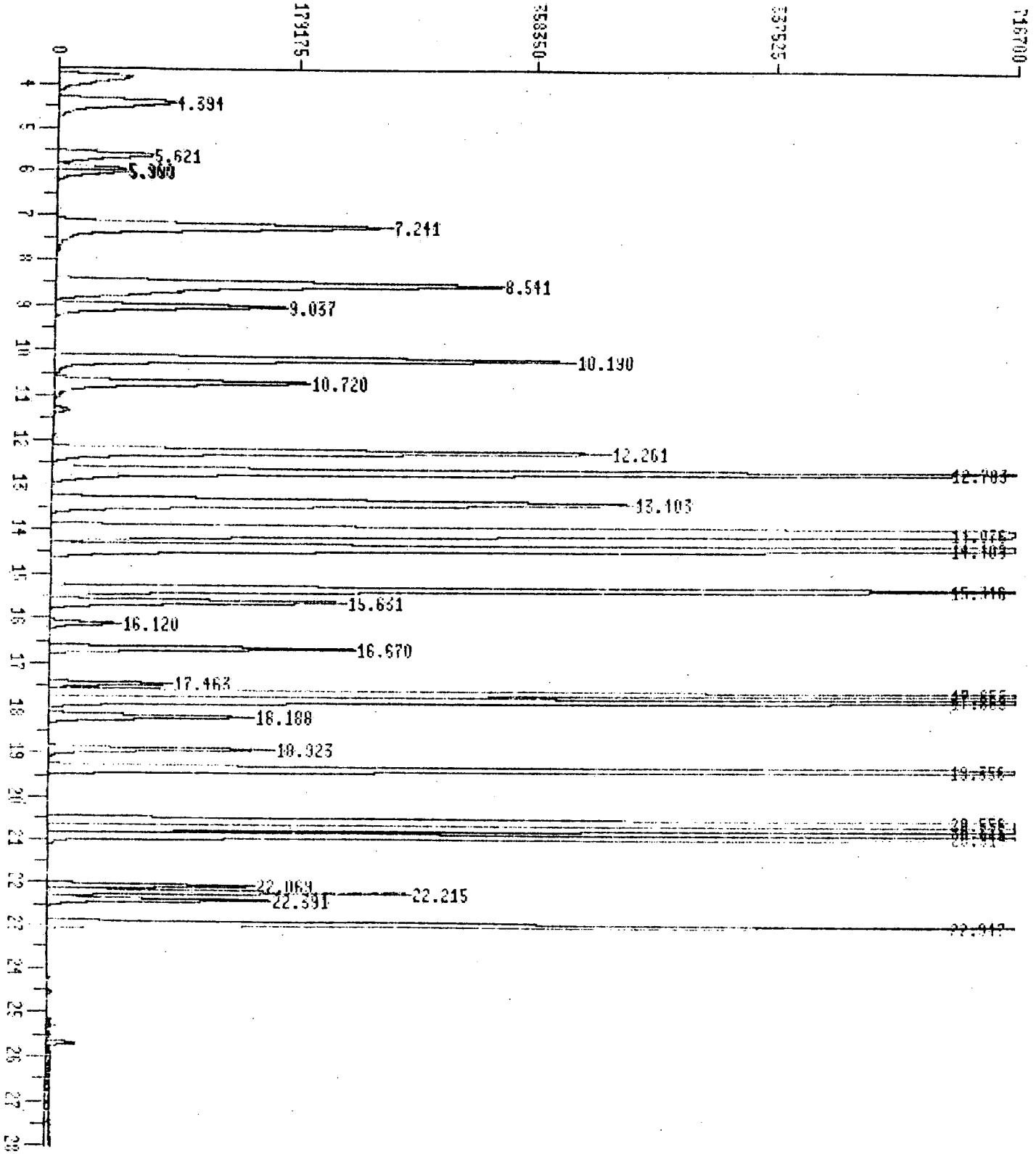
Data file: DATA:V009A20A.D
File type: GC / MS DATA FILE

Name Info: VOLATILE STANDARD 83.4 PPB0 + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 7:14 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A20A.D



End of plot. Time = 3.63 to 28.01 minutes Chart speed = 0.81 cm/min

TIC of DATA:V009A20A.D
VOLATILE STANDARD 83.4 PPB@ + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.394	BB	0.178	10885900	4.239	4.773
2	5.621	BH	0.155	7388872	5.478	5.812
3	5.960	VH	0.089	2649922	5.812	5.978
4	5.999	VH	0.106	3281763	5.978	6.215
5	7.241	BH	0.170	27629122	7.059	7.721
6	8.541	BH	0.166	38280610	8.384	8.907
7	9.037	PH	0.125	13605596	8.907	9.250
8	10.190	BH	0.113	28051137	10.061	10.542
9	10.720	BH	0.122	15457832	10.574	11.076
10	12.261	BH	0.123	32413215	12.048	12.529
11	12.703	PH	0.113	56924429	12.529	13.020
12	13.403	BH	0.159	46023164	13.148	13.661
13	14.076	BH	0.157	117811570	13.843	14.287
14	14.409	VH	0.101	93284955	14.287	14.676
15	15.346	BH	0.099	55058772	15.210	15.523
16	15.631	VH	0.092	13596714	15.523	15.808
17	16.120	BH	0.077	2672852	15.979	16.257
18	16.670	BH	0.085	12615139	16.492	16.813
19	17.463	BH	0.075	4341454	17.315	17.545
20	17.655	VH	0.083	54532826	17.545	17.729
21	17.809	VH	0.090	67572494	17.729	18.009
22	18.188	PH	0.089	8874293	18.009	18.351
23	18.923	BH	0.088	8810763	18.810	19.099
24	19.356	BH	0.089	62647226	19.184	19.505
25	20.556	BH	0.121	82413334	20.370	20.661
26	20.725	VH	0.085	75275961	20.661	20.826
27	20.914	VH	0.082	67753914	20.826	21.178
28	22.069	BH	0.077	7476338	21.972	22.134
29	22.215	VH	0.079	13639143	22.134	22.306
30	22.391	VH	0.079	8387707	22.306	22.549
31	22.947	BH	0.069	39253773	22.848	23.126

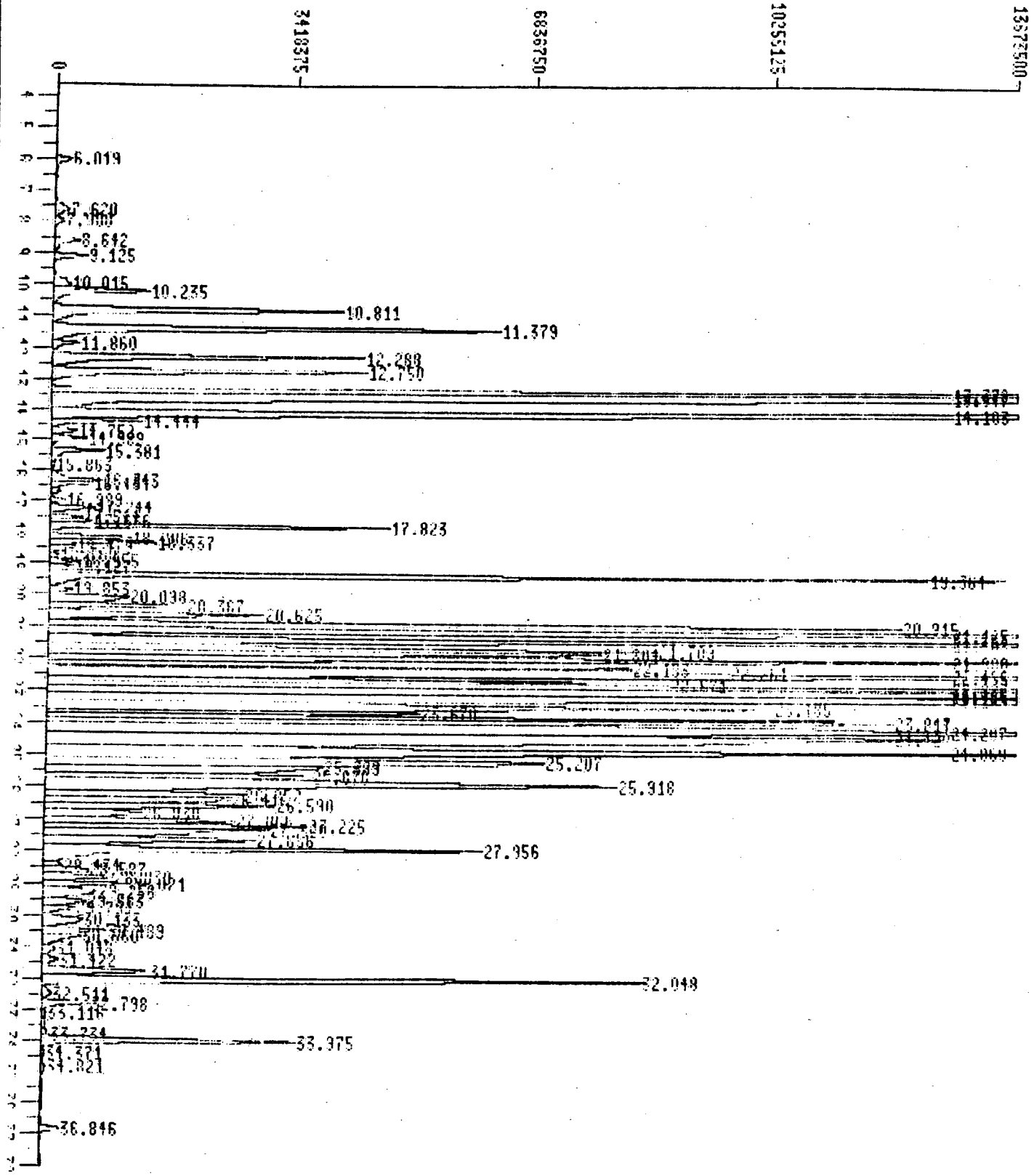
Data file: DATA:V009A21A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQUID 871123.013 DF = 100 + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 8:09 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A21A.D



End of plot. Time = 3.63 to 38.01 minutes Chart speed = 0.57 cm/min

TIC of DATA:V009A21A.D
WASTEX LIQUID 871123.013 DF = 100 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	6.019	VV	0.171	24228458	5.849	6.448
2	7.620	BH	0.214	33180783	7.212	7.842
3	7.988	VH	0.147	15055676	7.842	8.377
4	8.642	BH	0.144	36675308	8.475	8.972
5	9.125	VH	0.123	37218660	8.972	9.445
6	10.015	BH	0.180	34266817	9.586	10.080
7	10.235	VH	0.154	139794177	10.080	10.618
8	10.811	VH	0.149	389036150	10.618	11.185
9	11.379	VH	0.132	541608030	11.185	11.755
10	11.860	VH	0.131	32538301	11.755	12.125
11	12.288	VH	0.119	348236220	12.125	12.593
12	12.750	VH	0.128	359871388	12.593	13.104
13	13.376	PV	0.084	1479896809	13.104	13.427
14	13.547	VV	0.183	3418138486	13.427	13.912
15	14.103	VV	0.152	2362481341	13.912	14.357
16	14.444	VV	0.107	88271612	14.357	14.623
17	14.752	VV	0.142	34144770	14.623	14.880
18	14.989	VV	0.114	37734619	14.880	15.166
19	15.381	VV	0.117	62295671	15.225	15.730
20	15.863	VV	0.154	6046603	15.730	15.975
21	16.343	VV	0.127	63991163	15.975	16.403
22	16.434	VV	0.091	35592925	16.403	16.569
23	16.989	VV	0.104	14232252	16.858	17.097
24	17.244	VV	0.128	54542420	17.097	17.422
25	17.544	VV	0.094	26059709	17.422	17.595
26	17.666	VV	0.081	34272416	17.595	17.719
27	17.923	VV	0.095	278412618	17.719	18.006
28	18.206	VV	0.106	79325987	18.006	18.265
29	18.337	VV	0.096	96216938	18.265	18.436
30	18.479	VV	0.158	36360718	18.436	18.682
31	18.760	VV	0.103	9715701	18.682	18.842
32	18.955	VV	0.113	32898729	18.842	19.049
33	19.127	VV	0.104	22522546	19.049	19.199
34	19.364	VV	0.102	876969439	19.199	19.719
35	19.853	VV	0.138	28604307	19.719	19.960
[illegible]	[illegible]	VV	0.172	143542746	19.960	20.277
37	20.367	VV	0.099	126904342	20.277	20.476
38	20.625	VV	0.117	259921964	20.476	20.791
39	20.915	VV	0.091	685617965	20.791	21.014
40	21.125	VV	0.114	1469311556	21.014	21.261
41	21.408	VV	0.125	1264434934	21.261	21.539
42	21.709	VV	0.116	715187857	21.539	21.765
43	21.804	VV	0.100	463194234	21.765	21.880
44	21.980	VV	0.112	1112951422	21.880	22.091
45	22.183	VV	0.087	510415418	22.091	22.224
46	22.264	VV	0.079	393195583	22.224	22.305
47	22.455	VV	0.147	1821599511	22.305	22.575
48	22.671	VV	0.097	498496447	22.575	22.719
49	22.823	VV	0.119	1290034458	22.719	22.899
50	23.003	VV	0.127	1711532378	22.899	23.085
51	23.183	VV	0.181	1917184127	23.085	23.336
52	23.485	VV	0.153	1146639631	23.336	23.635
53	23.670	VV	0.084	292553331	23.635	23.739
54	23.844	VV	0.096	635641454	23.739	23.872
55	23.917	VV	0.095	782084663	23.872	24.002
56	24.207	VV	0.172	[illegible]	[illegible]	[illegible]

58	24.869	UU	0.158	1621280469	24.710	25.070
59	25.207	UU	0.201	919310930	25.070	25.351
60	25.389	UU	0.204	475797155	25.351	25.581
61	25.676	UU	0.133	340875046	25.581	25.753
62	25.918	UU	0.172	1009712297	25.753	26.133
63	26.252	UU	0.152	301517711	26.133	26.343
64	26.416	UU	0.116	213639178	26.343	26.499
65	26.590	UU	0.141	300283934	26.499	26.737
66	26.838	UU	0.167	150877027	26.737	26.957
67	27.066	UU	0.113	203935315	26.957	27.138
68	27.225	UU	0.101	254832965	27.138	27.283
69	27.320	UU	0.195	373595200	27.283	27.560
70	27.656	UU	0.132	259557017	27.560	27.804
71	27.956	UU	0.128	529245207	27.804	28.354
72	28.434	UU	0.112	16373854	28.354	28.480
73	28.587	UU	0.126	51672985	28.480	28.695
74	28.830	UU	0.126	82076200	28.695	28.933
75	29.021	UU	0.119	89142815	28.933	29.140
76	29.256	UU	0.195	107286908	29.140	29.461
77	29.583	UU	0.166	67297946	29.461	29.710
78	29.794	UU	0.149	44471756	29.710	29.951
79	30.133	UU	0.217	86724848	29.951	30.349
80	30.489	UU	0.143	85004215	30.349	30.600
81	30.660	UU	0.149	59907742	30.600	30.919
82	31.048	UU	0.183	23921194	30.919	31.224
83	31.422	UU	0.181	29385648	31.224	31.585
84	31.770	UU	0.145	139226002	31.585	31.889
85	32.048	UU	0.133	707019394	31.889	32.281
86	32.511	UU	0.167	18523180	32.281	32.642
87	32.798	UU	0.133	57425468	32.642	32.996
88	33.116	UU	0.179	7093012	32.996	33.273
89	33.734	UU	0.148	5743902	33.591	33.772
90	33.975	UU	0.141	311250206	33.772	34.216
91	34.371	UU	0.134	4547979	34.216	34.437
92	34.821	UU	0.214	9033863	34.645	35.202
93	36.846	UU	0.138	24648438	36.675	37.042

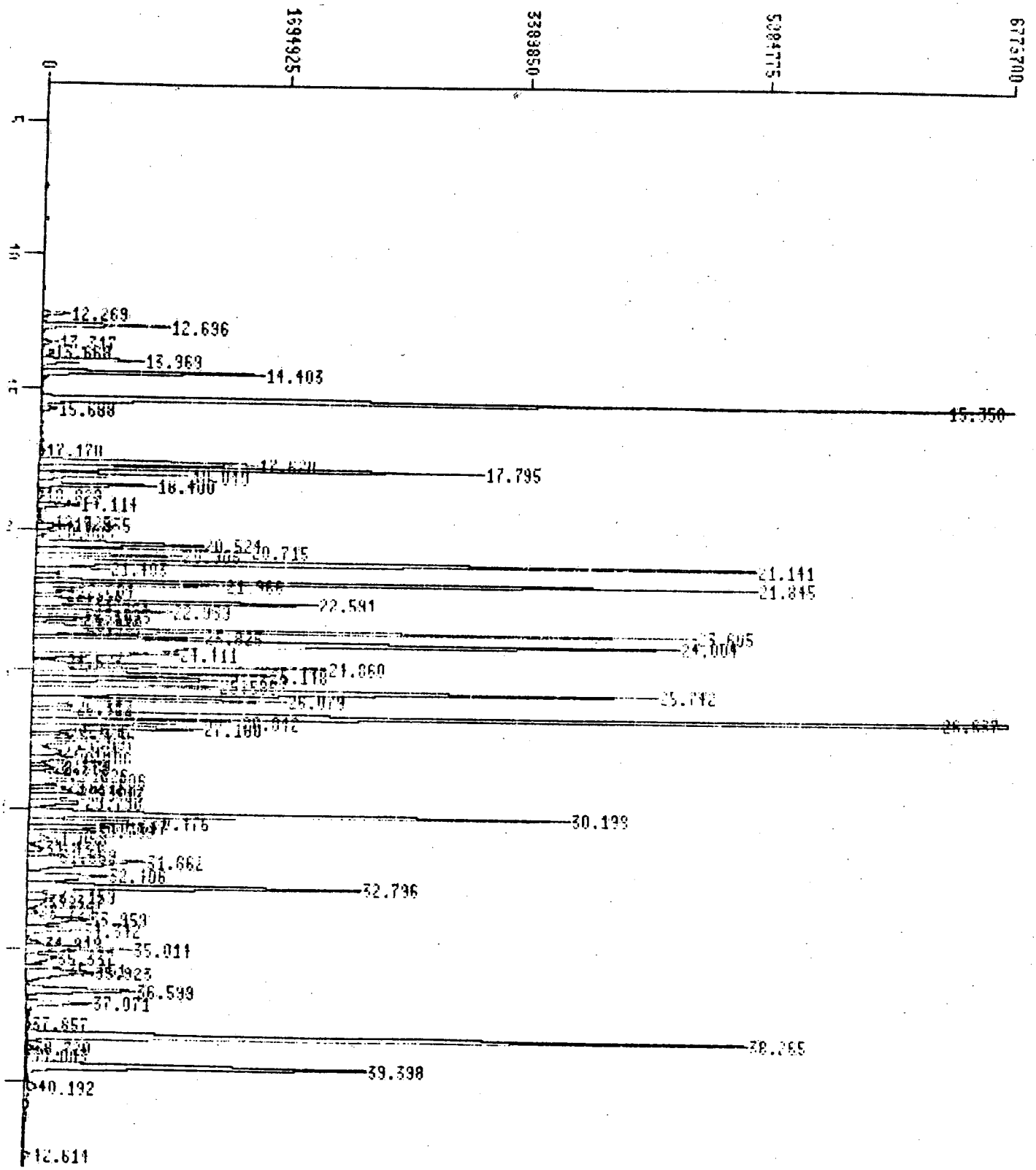
Data file: DATA:V009A22A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQUID 871120.044 DF = 100 + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 8:59 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:U009A22A.D



nd of plot. Time = 3.63 to 43.00 minutes Chart speed = 0.50 cm/min

TIC of DATA:V009A22A.D
WASTEX LIQUID 871120.044 DF = 100 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	12.269	BB	0.104	12233239	12.138	12.450
2	12.696	BH	0.109	61951368	12.547	12.959
3	13.317	BH	0.130	6658465	13.203	13.472
4	13.668	PH	0.156	10075791	13.472	13.836
5	13.969	VH	0.116	54285145	13.836	14.236
6	14.403	VH	0.101	100852819	14.236	14.606
7	15.350	BH	0.103	457905674	15.107	15.589
8	15.688	VH	0.123	8755255	15.589	15.871
9	17.170	PV	0.089	1865672	16.999	17.198
10	17.620	VV	0.128	137571480	17.389	17.707
11	17.795	VV	0.091	183392459	17.707	17.932
12	18.049	VV	0.111	76063113	17.932	18.253
13	18.400	VV	0.095	51907260	18.253	18.576
14	18.829	VV	0.087	2439196	18.764	18.929
15	19.114	VV	0.109	22300947	18.991	19.296
16	19.725	VV	0.069	2167923	19.635	19.740
17	19.835	VV	0.109	18732793	19.740	19.981
18	20.083	VV	0.109	10642818	19.981	20.195
19	20.524	VV	0.143	110135478	20.302	20.626
20	20.715	VV	0.088	85256288	20.626	20.819
21	20.906	VV	0.088	59012643	20.819	20.996
22	21.141	VV	0.124	389355758	20.996	21.317
23	21.403	VV	0.117	41058807	21.317	21.555
24	21.845	VV	0.083	272021296	21.726	21.928
25	21.966	VV	0.083	74672940	21.928	22.123
26	22.204	VV	0.092	17507372	22.123	22.280
27	22.356	VV	0.102	15234532	22.280	22.427
28	22.591	VV	0.124	156383250	22.427	22.728
29	22.794	VV	0.095	17603225	22.728	22.852
30	22.939	VV	0.098	63313645	22.852	23.045
31	23.093	VV	0.092	25576510	23.045	23.162
32	23.212	VV	0.087	19224404	23.162	23.309
33	23.439	VV	0.094	22732805	23.309	23.491
34	23.605	VV	0.087	263106071	23.491	23.736
35	23.825	VV	0.094	75364960	23.736	23.902
36	24.004	VV	0.164	549544430	23.902	24.366
37	24.411	VV	0.117	83936165	24.366	24.632
38	24.673	VV	0.052	4590058	24.632	24.689
39	24.860	VV	0.108	150912522	24.689	25.035
40	25.148	VV	0.120	124713938	25.035	25.252
41	25.339	VV	0.119	107867327	25.252	25.467
42	25.585	VV	0.101	87345228	25.467	25.638
43	25.742	VV	0.135	416757721	25.638	25.970
44	26.079	VV	0.109	123405220	25.970	26.209
45	26.362	VV	0.136	24587373	26.209	26.379
46	26.413	VV	0.071	14364067	26.379	26.469
47	26.637	VV	0.105	904444662	26.469	26.762
48	26.842	VV	0.122	123655941	26.762	26.997
49	27.100	VV	0.128	97388251	26.997	27.253
50	27.321	VV	0.092	17350530	27.253	27.380
51	27.422	VV	0.113	19691346	27.380	27.520
52	27.637	VV	0.140	30695795	27.520	27.788
53	27.974	VV	0.196	29226389	27.788	28.085
54	28.186	VV	0.153	32264850	28.085	28.366
55	28.449	VV	0.082	6882259	28.366	28.480
56	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

58	29.006	UU	0.113	32662029	28.915	29.146
59	29.252	UU	0.100	16652738	29.146	29.295
60	29.400	UU	0.119	20762792	29.295	29.427
61	29.513	UU	0.157	43694922	29.427	29.684
62	29.790	UU	0.139	35970461	29.684	29.939
63	30.198	UU	0.124	306776208	29.939	30.351
64	30.476	UU	0.136	74060465	30.351	30.574
65	30.647	UU	0.118	46622408	30.574	30.735
66	30.799	UU	0.117	36252270	30.735	30.939
67	31.058	UU	0.164	17587349	30.939	31.273
68	31.431	UU	0.140	10898773	31.273	31.537
69	31.669	UU	0.105	13091459	31.537	31.691
70	31.862	UU	0.222	131134483	31.691	32.234
71	32.406	UU	0.188	72980259	32.234	32.622
72	32.796	UU	0.131	206785391	32.622	33.010
73	33.159	UU	0.162	24865677	33.010	33.286
74	33.327	UU	0.157	16136002	33.286	33.592
75	33.724	UU	0.105	5492827	33.592	33.767
76	33.959	UU	0.180	58849994	33.767	34.181
77	34.342	UU	0.168	41895041	34.181	34.641
78	34.818	UU	0.112	6766717	34.641	34.854
79	35.014	UU	0.148	69836134	34.854	35.190
80	35.337	UU	0.181	29810462	35.190	35.566
81	35.751	UU	0.151	22076570	35.566	35.783
82	35.923	UU	0.200	70635462	35.783	36.325
83	36.599	UU	0.159	77425493	36.384	36.880
84	37.071	UU	0.143	40447141	36.880	37.372
85	37.857	PU	0.134	2661101	37.747	38.031
86	38.265	UU	0.143	450265251	38.031	38.569
87	38.720	PU	0.130	4187359	38.569	38.852
88	39.003	UU	0.113	2548823	38.852	39.168
89	39.398	UU	0.158	233105846	39.168	39.828
90	40.192	PU	0.193	8722331	39.828	40.411
91	42.614	BU	0.111	4399121	42.398	42.850

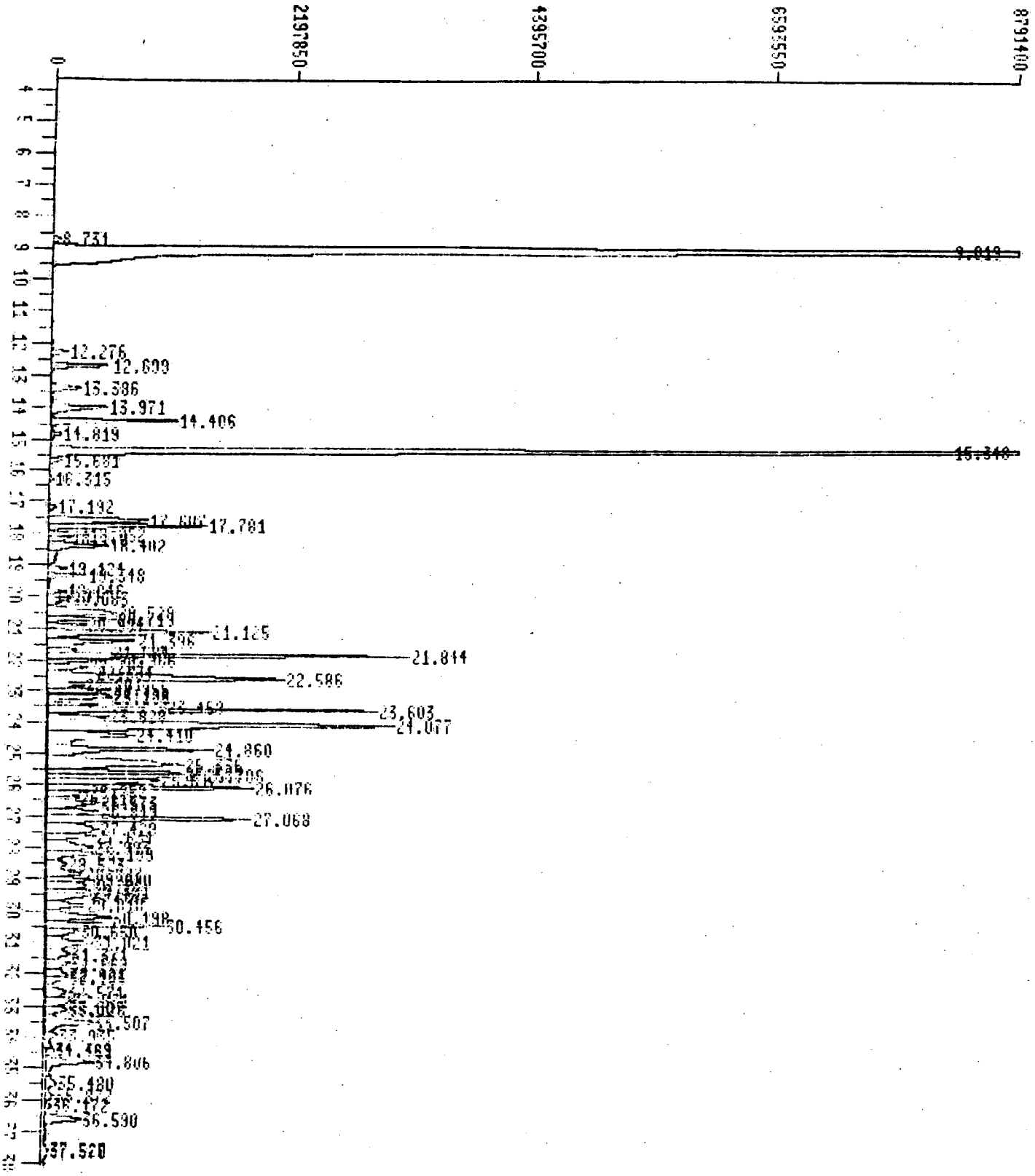
Data file: DATA:V009A23A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871120.045 DF = 40 + 100 PPB ISS
Misc Info: 5.0 MLS 1600 EMV 1/2 HHS
Operator : T. SABATINO

Date : 30 Nov 87 9:47 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A23A.D



End of plot. Time = 3.63 to 38.02 minutes Chart speed = 0.57 cm/min

TIC of DATA:U009A23A.D
WASTEX 871120.045 DF = 40 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.731	BV	0.138	6334827	8.572	8.858
2	9.019	VB	0.170	1887038295	8.858	9.638
3	12.276	BH	0.102	10492724	12.146	12.448
4	12.699	BH	0.112	37686480	12.566	12.965
5	13.386	BV	0.145	23831560	13.212	13.599
6	13.971	VV	0.127	45346341	13.833	14.250
7	14.406	VV	0.102	75355621	14.250	14.638
8	14.819	VV	0.109	7991255	14.638	15.027
9	15.348	BV	0.128	831137132	15.182	15.594
10	15.681	VV	0.112	8411251	15.594	15.915
11	16.315	BH	0.115	3747809	16.108	16.431
12	17.192	VH	0.125	6000526	17.028	17.379
13	17.607	PV	0.146	83642850	17.379	17.709
14	17.781	VV	0.096	87519296	17.709	17.929
15	18.052	VV	0.099	24722798	17.929	18.127
16	18.170	VV	0.116	14320787	18.127	18.267
17	18.402	VV	0.123	47264024	18.267	18.574
18	19.124	VV	0.111	13003810	19.022	19.249
19	19.348	VV	0.086	19530716	19.249	19.457
20	19.846	VV	0.095	9697564	19.725	19.924
21	19.944	VV	0.055	2107664	19.924	19.987
22	20.083	VV	0.138	21154501	19.987	20.275
23	20.529	VV	0.169	78899013	20.275	20.646
24	20.719	VV	0.090	36792887	20.646	20.821
25	20.904	VV	0.083	19506530	20.821	21.002
26	21.125	VV	0.118	114592452	21.002	21.287
27	21.396	VV	0.126	72379736	21.287	21.608
28	21.684	VV	0.088	16842446	21.608	21.730
29	21.844	VV	0.087	181372406	21.730	21.934
30	21.966	VV	0.102	39475917	21.934	22.093
31	22.204	VV	0.136	34656293	22.093	22.312
32	22.334	VV	0.036	4648488	22.312	22.349
33	22.586	VV	0.144	231624746	22.349	22.736
34	22.801	VV	0.091	20684117	22.736	22.867
35	22.955	VV	0.112	51784675	22.867	23.058
36	23.128	VV	0.081	29315812	23.058	23.154
37	23.209	VV	0.110	41720486	23.154	23.341
38	23.458	VV	0.091	25196316	23.341	23.497
39	23.603	VV	0.089	174785547	23.497	23.737
40	23.828	VV	0.110	42547148	23.737	23.921
41	24.077	VV	0.143	324163977	23.921	24.281
42	24.410	VV	0.177	111078462	24.281	24.711
43	24.860	VV	0.110	116677135	24.711	25.035
44	25.336	VV	0.200	184151436	25.035	25.468
45	25.588	VV	0.103	85231545	25.468	25.636
46	25.706	VV	0.116	110400910	25.636	25.790
47	25.842	VV	0.120	91390934	25.790	25.966
48	26.076	VV	0.124	146852589	25.966	26.190
49	26.252	VV	0.123	33110999	26.190	26.375
50	26.418	VV	0.088	17063768	26.375	26.484
51	26.573	VV	0.156	53509880	26.484	26.747
52	26.849	VV	0.122	41714858	26.747	26.948
53	27.068	VV	0.125	153553013	26.948	27.226
54	27.429	VV	0.205	74027798	27.226	27.548
55	27.634	VV	0.132	39520291	27.548	27.748

58	28.523	UU	0.176	24220860	28.373	28.646
59	28.827	UU	0.152	38022981	28.646	28.929
60	29.020	UU	0.105	32783621	28.929	29.102
61	29.224	UU	0.152	39291654	29.102	29.304
62	29.391	UU	0.118	32538473	29.304	29.450
63	29.489	UU	0.144	41072429	29.450	29.696
64	29.818	UU	0.153	37829617	29.696	29.967
65	30.198	UU	0.162	68258168	29.967	30.326
66	30.456	UU	0.122	87502400	30.326	30.572
67	30.650	UU	0.141	32937181	30.572	30.824
68	31.021	UU	0.189	58047984	30.824	31.219
69	31.371	UU	0.200	30275911	31.219	31.535
70	31.669	UU	0.160	25930450	31.535	31.817
71	32.021	UU	0.161	24586533	31.817	32.078
72	32.104	UU	0.144	19832174	32.078	32.344
73	32.571	UU	0.200	27215704	32.344	32.708
74	32.831	UU	0.188	30180285	32.708	32.982
75	33.007	UU	0.056	5443989	32.982	33.040
76	33.126	UU	0.136	20146057	33.040	33.272
77	33.507	UU	0.202	59347596	33.272	33.807
78	33.935	UU	0.157	13867749	33.807	34.090
79	34.389	UU	0.065	3490526	34.323	34.409
80	34.459	UU	0.154	7487882	34.409	34.635
81	34.806	UU	0.162	49839997	34.635	35.221
82	35.480	UU	0.201	17492487	35.271	35.704
83	35.872	UU	0.142	9793647	35.765	36.062
84	36.172	UU	0.132	6515489	36.062	36.363
85	36.590	UU	0.176	36524688	36.363	36.815
86	37.527	PU	0.098	860833	37.390	37.542
87	37.570	UU	0.041	371604	37.542	37.609

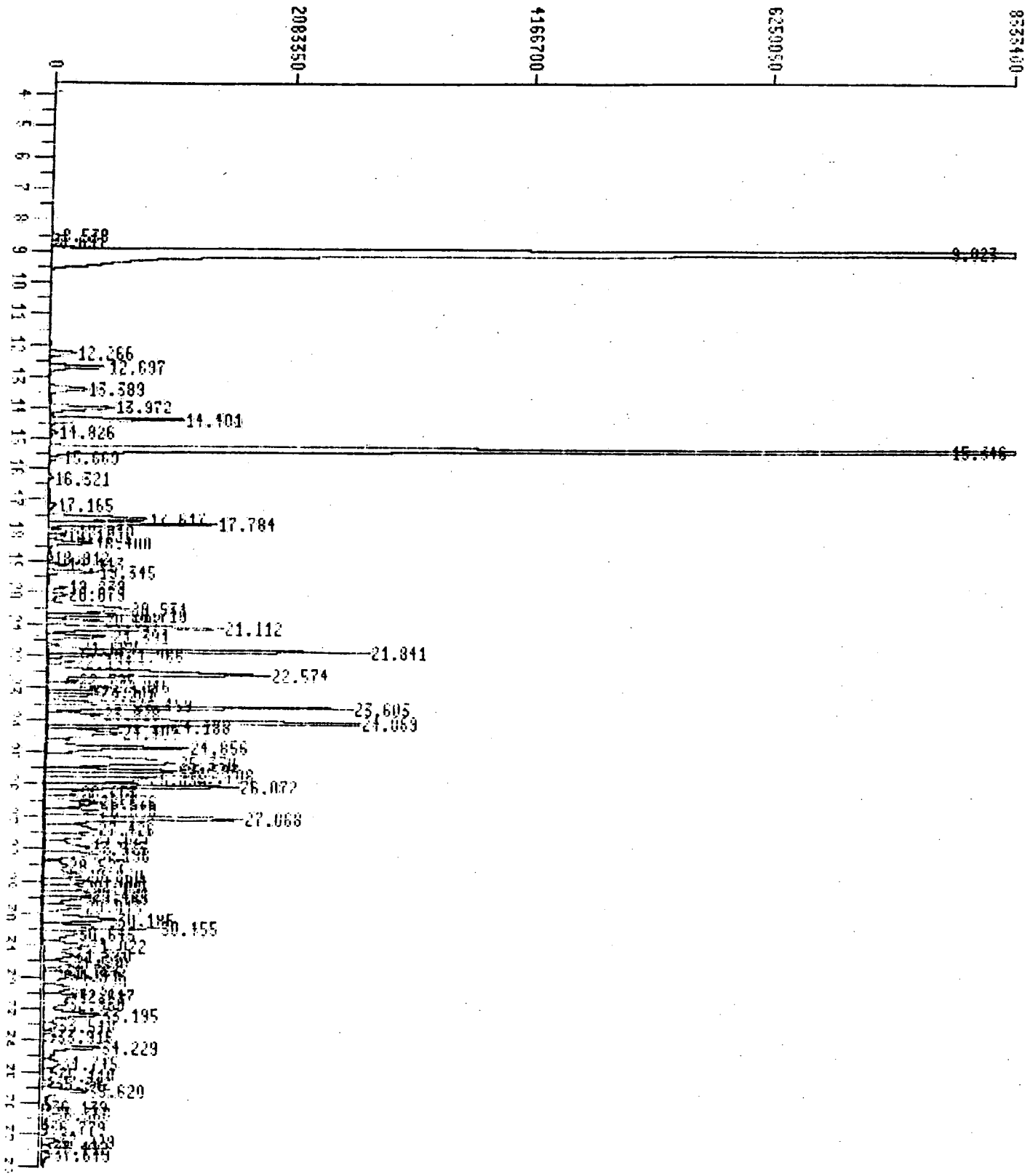
Data file: DATA:V009A24A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871120.045 DF = 40 + 100 PPB ISS
Misc Info: 5.0 MLS 1600 EMV 1/2 HHS + FORTIFICATION 1.00 UGS@
Operator : T. SABATINO

Date : 30 Nov 87 10:31 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A24A.D



End of plot. Time = 3.63 to 38.01 minutes Chart speed = 0.57 cm/min

TIC of DATA:V009A24A.D
WASTEX 871120.045 DF = 40 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.538	BV	0.116	7186771	8.402	8.653
2	8.691	VV	0.125	5304478	8.653	8.851
3	9.023	VV	0.166	1748614613	8.851	9.681
4	12.266	VH	0.119	16830054	12.120	12.455
5	12.697	BH	0.109	36131089	12.551	12.949
6	13.389	BH	0.151	31092814	13.186	13.608
7	13.972	VH	0.145	60423636	13.837	14.255
8	14.401	PH	0.101	74756274	14.255	14.678
9	14.826	VH	0.116	4278086	14.678	15.002
10	15.346	BV	0.120	777009543	15.185	15.584
11	15.669	VB	0.109	8304918	15.584	15.948
12	16.321	VH	0.101	2560916	16.217	16.442
13	17.165	PV	0.124	6099651	17.051	17.379
14	17.617	VV	0.150	78807113	17.379	17.702
15	17.784	VV	0.098	88047772	17.702	17.936
16	18.040	VV	0.102	15617581	17.936	18.125
17	18.172	VV	0.082	8651816	18.125	18.264
18	18.400	VV	0.103	26848497	18.264	18.617
19	18.912	VV	0.162	4447102	18.725	19.017
20	19.113	VV	0.108	11299562	19.017	19.244
21	19.345	VV	0.086	23878345	19.244	19.461
22	19.839	PV	0.100	11685174	19.710	19.986
23	20.079	VV	0.135	15864793	19.986	20.277
24	20.531	VV	0.156	85389455	20.277	20.646
25	20.718	VV	0.090	42274878	20.646	20.812
26	20.897	VV	0.090	27087558	20.812	21.000
27	21.112	VV	0.104	108919347	21.000	21.283
28	21.391	VV	0.101	38276716	21.283	21.600
29	21.688	VV	0.078	4569649	21.600	21.720
30	21.841	VV	0.074	143601274	21.720	21.927
31	21.966	VV	0.087	38643592	21.927	22.114
32	22.194	VV	0.100	15898840	22.114	22.293
33	22.524	VV	0.148	199824009	22.293	22.730
34	22.795	VV	0.083	14799042	22.730	22.852
35	22.946	VV	0.120	48399023	22.852	23.052
36	23.113	VV	0.095	25509708	23.052	23.154
37	23.201	VV	0.108	31025525	23.154	23.342
38	23.459	VV	0.085	21371186	23.342	23.498
39	23.603	VV	0.091	153190148	23.498	23.740
40	23.828	VV	0.104	34216601	23.740	23.913
41	24.069	VV	0.125	231081568	23.913	24.172
42	24.188	VV	0.068	44533946	24.172	24.279
43	24.409	VV	0.161	78254428	24.279	24.613
44	24.856	VV	0.112	97327448	24.711	25.037
45	25.330	VV	0.196	169150444	25.037	25.467
46	25.583	VV	0.110	83784462	25.467	25.641
47	25.708	VV	0.111	98485164	25.641	25.792
48	25.838	VV	0.141	74809844	25.792	25.957
49	26.072	VV	0.120	131323596	25.957	26.193
50	26.253	VV	0.114	24789613	26.193	26.352
51	26.419	VV	0.097	18018684	26.352	26.476
52	26.576	VV	0.163	54697488	26.476	26.747
53	26.838	VV	0.129	41670250	26.747	26.943
54	27.068	VV	0.134	148493070	26.943	27.242
55	27.426	VV	0.194	65667996	27.242	27.546

58	28.198	UU	0.146	44354726	28.093	28.356
59	28.527	UU	0.160	25837503	28.391	28.653
60	28.830	UU	0.146	38142906	28.653	28.929
61	29.004	UU	0.116	32922422	28.929	29.105
62	29.209	UU	0.156	35969160	29.105	29.298
63	29.424	UU	0.133	32121096	29.298	29.446
64	29.485	UU	0.167	40543308	29.446	29.701
65	29.813	UU	0.146	35767950	29.701	29.965
66	30.185	UU	0.164	72626766	29.965	30.316
67	30.455	UU	0.129	83334793	30.316	30.571
68	30.645	UU	0.158	34411720	30.571	30.849
69	31.022	UU	0.178	50207593	30.849	31.185
70	31.330	UU	0.163	32308472	31.185	31.461
71	31.590	UU	0.151	26956366	31.461	31.715
72	31.786	UU	0.068	7305670	31.715	31.799
73	31.825	UU	0.045	4478783	31.799	31.846
74	31.993	UU	0.232	38118464	31.846	32.230
75	32.372	UU	0.185	29115711	32.230	32.510
76	32.617	UU	0.179	34763374	32.510	32.780
77	32.860	UU	0.141	20407431	32.780	32.982
78	33.195	UU	0.178	61615599	32.982	33.448
79	33.548	UU	0.151	14877013	33.448	33.702
80	33.916	UU	0.195	13516619	33.813	34.060
81	34.229	UU	0.165	56125501	34.060	34.586
82	34.745	UU	0.177	19565124	34.586	34.890
83	35.110	UU	0.196	19076207	34.890	35.252
84	35.342	UU	0.142	9158785	35.252	35.466
85	35.620	UU	0.162	39710028	35.466	35.823
86	36.139	UU	0.103	5123558	36.047	36.213
87	36.368	UU	0.206	15190075	36.213	36.692
88	36.779	UU	0.112	3218035	36.692	36.827
89	37.229	UU	0.131	13896016	37.048	37.338
90	37.442	UU	0.134	7435500	37.338	37.542
91	37.649	UBA	0.136	9354523	37.542	37.957

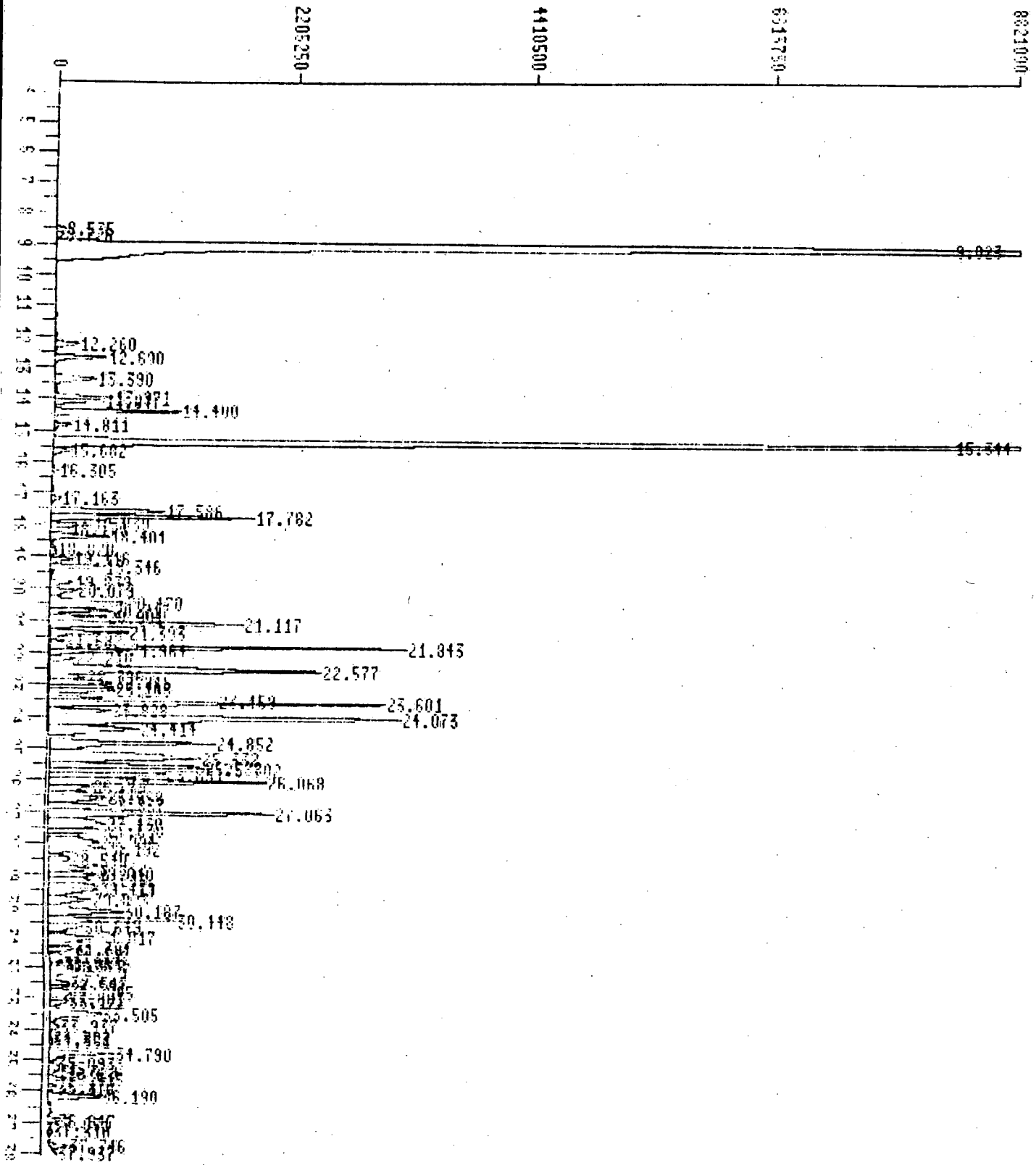
Data file: DATA:V009A25A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871120.045 DF = 40 + 100 PPB ISS MSD
Misc Info: 5.0 MLS 1600 EMV 1/2 HHS + FORTIFICATION 1.00 UGS@
Operator : T. SABATINO

Date : 30 Nov 87 11:15 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A25A.D



End of plot. Time = 3.63 to 38.02 minutes Chart speed = 0.57 cm/min

TIC of DATA:V009A25A.D
WASTEX 871120.045 DF = 40 + 100 PPB ISS MSD

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.535	BV	0.129	7447297	8.383	8.643
2	8.726	VV	0.124	5955074	8.643	8.852
3	9.023	VB	0.148	1946780917	8.852	9.674
4	12.260	PV	0.112	15790555	12.120	12.409
5	12.690	BB	0.107	32333043	12.556	12.943
6	13.390	BH	0.148	34600426	13.212	13.611
7	13.971	VH	0.101	35245511	13.824	14.032
8	14.047	VH	0.093	25383217	14.032	14.260
9	14.400	PH	0.101	73613367	14.260	14.619
10	14.811	VH	0.098	9930193	14.619	14.914
11	15.344	VV	0.135	949772657	15.186	15.583
12	15.682	VV	0.120	11613691	15.583	15.857
13	16.305	VB	0.097	3437974	16.197	16.438
14	17.163	VV	0.123	7096655	17.042	17.394
15	17.586	PV	0.141	91317605	17.394	17.695
16	17.782	VV	0.093	114409442	17.695	17.931
17	18.039	VV	0.099	25473957	17.931	18.128
18	18.170	VV	0.086	10133821	18.128	18.254
19	18.401	VV	0.112	39844587	18.254	18.601
20	18.820	VV	0.170	6891404	18.746	19.018
21	19.116	VV	0.106	14979746	19.018	19.242
22	19.346	VV	0.093	27445755	19.242	19.461
23	19.839	PV	0.102	15301108	19.713	19.976
24	20.029	VV	0.141	22809212	19.976	20.257
25	20.420	VV	0.184	92352153	20.257	20.645
26	20.717	VV	0.090	33908314	20.645	20.813
27	20.901	VV	0.084	27700203	20.813	20.997
28	21.117	VV	0.108	129502804	20.997	21.288
29	21.393	VV	0.108	50060032	21.288	21.602
30	21.682	VV	0.078	7271754	21.602	21.727
31	21.843	VV	0.083	170294195	21.727	21.930
32	21.964	VV	0.097	41944445	21.930	22.106
33	22.210	VV	0.117	18083254	22.106	22.299
34	22.577	VV	0.139	251042251	22.299	22.729
35	22.796	VV	0.088	19723784	22.729	22.857
36	22.946	VV	0.123	52869694	22.857	23.048
37	23.116	VV	0.094	36518213	23.048	23.160
38	23.206	VV	0.090	39046192	23.160	23.334
39	23.459	VV	0.089	28426794	23.334	23.499
40	23.601	VV	0.097	183658134	23.499	23.740
41	23.828	VV	0.099	39552697	23.740	23.908
42	24.073	VV	0.142	326382570	23.908	24.274
43	24.414	VV	0.161	98193252	24.274	24.611
44	24.852	VV	0.114	120363120	24.714	25.037
45	25.332	VV	0.196	199819010	25.037	25.468
46	25.588	VV	0.101	93807659	25.468	25.632
47	25.702	VV	0.118	131443108	25.632	25.800
48	25.831	VV	0.133	84300039	25.800	25.956
49	26.068	VV	0.120	156960293	25.956	26.192
50	26.257	VV	0.117	32514733	26.192	26.362
51	26.416	VV	0.082	19772759	26.362	26.474
52	26.568	VV	0.157	58549826	26.474	26.738
53	26.837	VV	0.123	46798001	26.738	26.940
54	27.063	VV	0.126	169938498	26.940	27.233
55	27.430	VV	0.207	78963281	27.233	27.548
56	27.630	VV	0.131	45309659	27.548	27.737

58	28.192	UU	0.155	54832551	28.081	28.364
59	28.540	UU	0.155	20346237	28.445	28.647
60	28.832	UU	0.156	40820931	28.647	28.922
61	29.010	UU	0.114	35720666	28.922	29.095
62	29.212	UU	0.147	41639110	29.095	29.297
63	29.414	UU	0.104	32538021	29.297	29.438
64	29.479	UU	0.165	43852614	29.438	29.677
65	29.823	UU	0.153	42589187	29.677	29.977
66	30.187	UU	0.152	73178926	29.977	30.317
67	30.448	UU	0.127	93319381	30.317	30.573
68	30.649	UU	0.138	30672036	30.573	30.795
69	31.017	UU	0.196	58506516	30.847	31.231
70	31.304	UU	0.066	9620501	31.231	31.319
71	31.381	UU	0.119	17208235	31.319	31.476
72	31.668	UU	0.160	23976952	31.515	31.812
73	31.843	UU	0.042	2862559	31.812	31.861
74	31.885	UU	0.037	2457197	31.861	31.899
75	31.925	UU	0.044	3372046	31.899	31.946
76	32.097	UU	0.198	32187263	31.946	32.354
77	32.547	UU	0.106	14475356	32.354	32.571
78	32.592	UU	0.094	10077705	32.571	32.690
79	32.805	UU	0.168	28677962	32.690	32.975
80	33.001	UU	0.087	7736946	32.975	33.064
81	33.122	UU	0.114	13781472	33.064	33.264
82	33.505	UU	0.185	58361085	33.264	33.782
83	33.937	UU	0.112	7561428	33.782	34.092
84	34.302	BU	0.066	1337119	34.182	34.344
85	34.391	UU	0.060	1311509	34.344	34.430
86	34.790	UU	0.122	48072180	34.576	35.032
87	35.093	UU	0.074	2090596	35.032	35.115
88	35.292	UU	0.110	11779854	35.115	35.315
89	35.329	UU	0.098	8371710	35.315	35.503
90	35.615	UU	0.142	13861401	35.503	35.765
91	35.822	UU	0.073	4179274	35.765	35.895
92	35.910	UU	0.060	2583199	35.895	35.998
93	36.190	UU	0.147	44470667	35.998	36.407
94	36.947	UU	0.125	7353208	36.772	37.028
95	37.051	UU	0.045	1310285	37.028	37.077
96	37.310	UU	0.058	1825643	37.248	37.335
97	37.746	BU	0.112	11895710	37.630	37.880
98	37.937	UU	0.047	268602	37.880	37.955

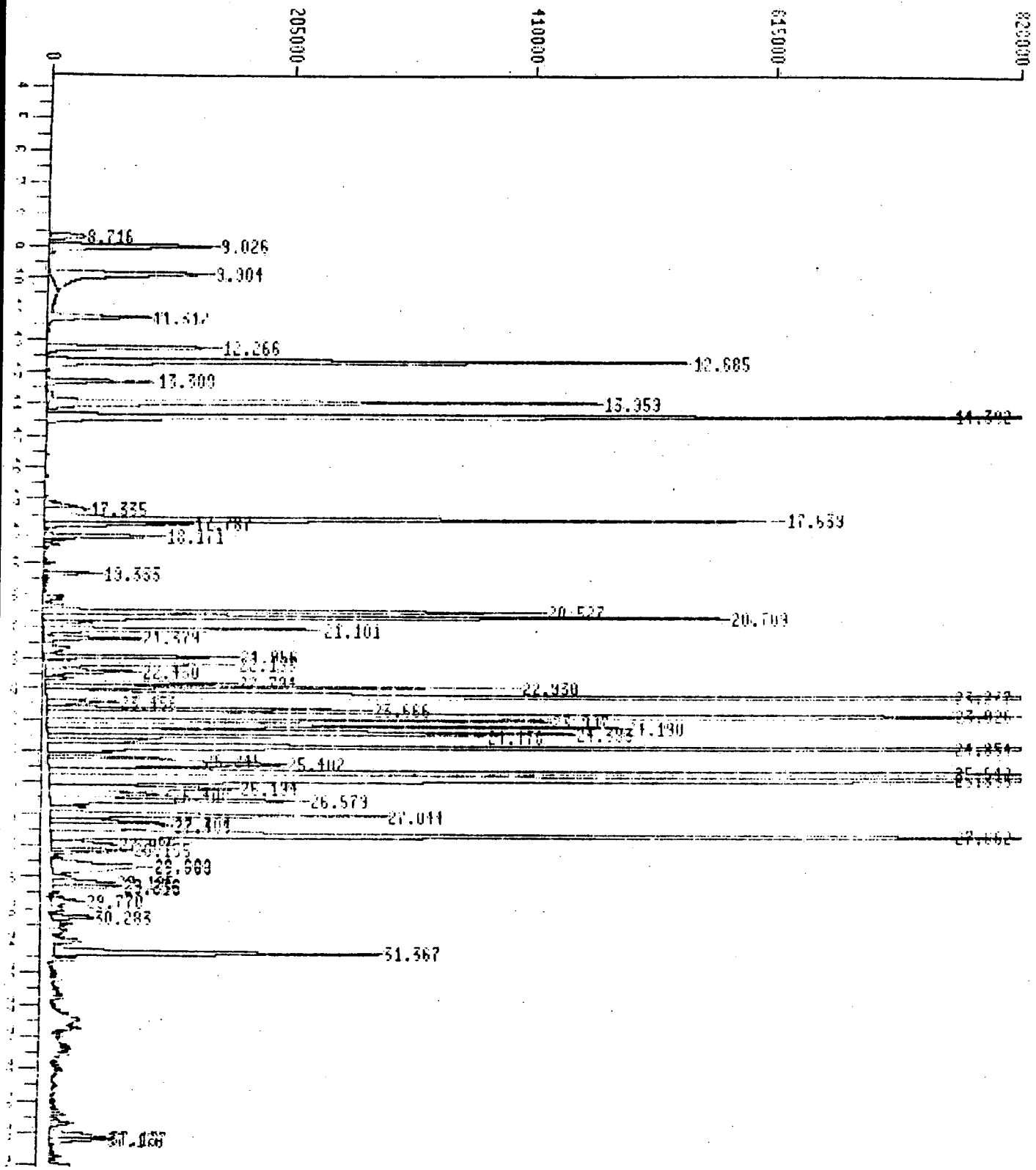
Data file: DATA:V009A26A.D
File type: GC / MS DATA FILE

Name Info: WASTEX A71123.011 DF = 70.2 + 100 PPB ISS
Misc Info: 5.0 MLS 1600 EMV 1/2 HHS
Operator : T. SABATINO

Date : 1 Dec 87 12:14 am
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A26A.D



nd of plot. Time = 3.63 to 38.01 minutes Chart speed = 0.57 cm/min

TIC of DATA:U009A26A.D
WASTEX 871123.011 DF = 70.2 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	8.716	BV	0.128	2624251	8.597	8.843
2	9.026	PH	0.130	11805505	8.843	9.293
3	9.904	BV	0.159	14882351	9.753	10.460
4	11.312	BV	0.123	6822483	11.166	11.530
5	12.266	BH	0.110	9834844	12.140	12.451
6	12.685	BH	0.108	37138164	12.547	12.949
7	13.309	BH	0.084	5450592	13.147	13.457
8	13.959	BV	0.106	32021627	13.768	14.206
9	14.392	PH	0.098	61271845	14.206	14.656
10	17.335	VH	0.148	3314150	17.273	17.449
11	17.639	VH	0.092	37562553	17.449	17.743
12	17.787	VH	0.086	7076606	17.743	17.985
13	18.171	BH	0.087	5707622	18.039	18.275
14	19.333	BH	0.066	1875538	19.238	19.420
15	20.527	VV	0.086	23333589	20.424	20.619
16	20.709	VV	0.093	34012452	20.619	20.840
17	21.101	VV	0.088	13144839	20.980	21.274
18	21.379	PV	0.093	4755032	21.274	21.518
19	21.956	VV	0.085	8375507	21.847	22.064
20	22.193	VV	0.088	9149094	22.064	22.326
21	22.430	VV	0.107	5472471	22.326	22.578
22	22.794	VV	0.081	8355799	22.702	22.853
23	22.938	VV	0.087	23228747	22.853	23.056
24	23.237	VV	0.106	81669949	23.056	23.379
25	23.456	VV	0.098	3996550	23.379	23.566
26	23.666	VV	0.080	14143658	23.566	23.728
27	23.826	VV	0.132	75960794	23.728	23.957
28	23.997	VV	0.090	23362121	23.957	24.105
29	24.190	VV	0.085	27583631	24.105	24.276
30	24.383	VV	0.094	28354618	24.276	24.438
31	24.476	VV	0.101	22837294	24.438	24.607
32	24.854	VV	0.095	72663577	24.730	25.030
33	25.245	VV	0.079	5185040	25.155	25.269
34	25.402	VV	0.166	22376744	25.269	25.532
35	25.642	VV	0.095	58017865	25.532	25.729
36	25.833	VV	0.107	129940368	25.729	26.089
37	26.194	VV	0.121	13725655	26.089	26.302
38	26.408	VV	0.113	8166843	26.302	26.478
39	26.579	VV	0.117	16841788	26.478	26.751
40	27.044	VV	0.108	19670191	26.927	27.179
41	27.301	VV	0.090	6212072	27.179	27.330
42	27.405	VV	0.179	10769106	27.330	27.539
43	27.662	VV	0.108	63556488	27.539	27.839
44	27.985	VV	0.137	5886648	27.839	28.089
45	28.155	VV	0.061	2775459	28.089	28.181
46	28.609	VV	0.066	3010317	28.453	28.621
47	28.665	VV	0.177	8925412	28.621	29.027
48	29.195	VV	0.079	2727993	29.084	29.216
49	29.236	VV	0.038	1144375	29.216	29.255
50	29.316	VV	0.113	4403302	29.255	29.472
51	29.770	VV	0.105	2112501	29.682	29.921
52	30.283	BV	0.120	2488704	30.135	30.361
53	31.367	PV	0.110	19415475	31.125	31.508
54	37.137	BV	0.109	4087398	36.858	37.161
55	37.176	VB	0.098	2788223	37.161	37.356

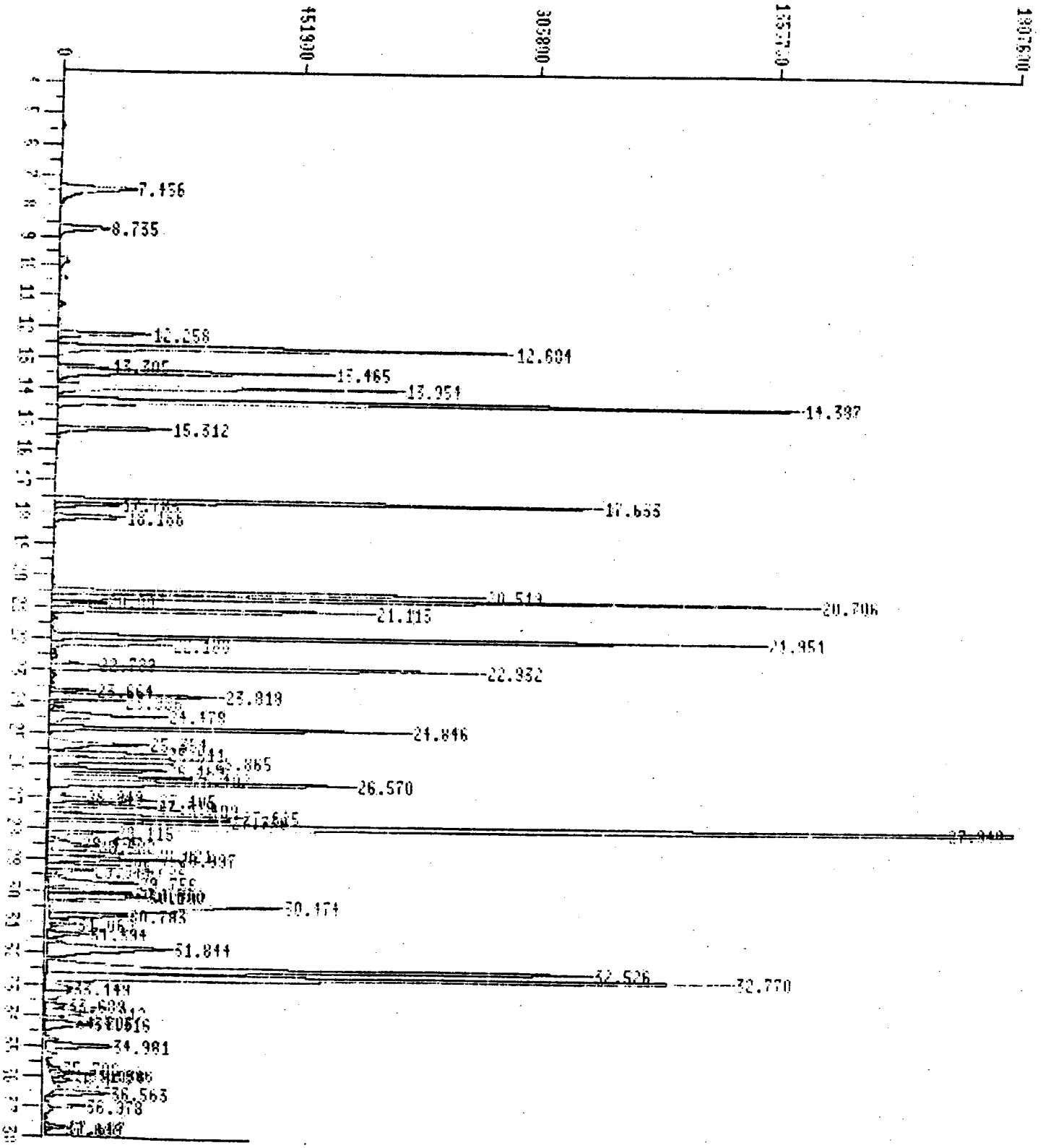
Data file: DATA:V009A27A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871123.017 DF = 100 + 100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 1 Dec 87 3:16 am
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:U009A27A.D



End of plot. Time = 3.63 to 38.02 minutes Chart speed = 0.57 cm/min

TIC of DATA:U009A27A.D
WASTEX 871123.017 DF = 100 + 100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.456	BU	0.178	18205432	7.275	7.900
2	8.735	BH	0.122	8844716	8.561	9.076
3	12.258	BH	0.107	11243638	12.120	12.409
4	12.684	BH	0.107	59728376	12.549	12.967
5	13.305	BH	0.081	5368537	13.192	13.353
6	13.465	VH	0.117	39777575	13.353	13.816
7	13.954	VH	0.106	43849686	13.816	14.210
8	14.387	PH	0.103	93718755	14.210	14.639
9	15.312	BH	0.094	13370244	15.186	15.518
10	17.633	BH	0.091	58474995	17.512	17.741
11	17.783	VH	0.078	6434116	17.741	17.909
12	18.166	BH	0.096	8077830	18.048	18.338
13	20.519	BH	0.086	43856934	20.396	20.616
14	20.706	VH	0.075	77456912	20.616	20.831
15	20.892	VH	0.068	4766799	20.831	20.991
16	21.113	VH	0.079	30662525	20.991	21.253
17	21.951	VH	0.080	69480038	21.734	22.100
18	22.188	VH	0.088	12199623	22.100	22.485
19	22.789	VH	0.068	2161525	22.678	22.830
20	22.932	VH	0.080	41105008	22.830	23.065
21	23.664	PH	0.076	3989874	23.521	23.729
22	23.818	VH	0.111	25332462	23.729	23.946
23	23.986	VH	0.073	6955435	23.946	24.118
24	24.478	VH	0.111	16832516	24.264	24.736
25	24.846	VH	0.083	34695059	24.736	25.021
26	25.354	VV	0.117	15106334	25.146	25.553
27	25.641	VV	0.086	12225040	25.553	25.751
28	25.865	VV	0.137	25343821	25.751	26.026
29	26.169	VV	0.106	14644466	26.026	26.275
30	26.402	VV	0.111	18110205	26.275	26.469
31	26.570	VB	0.117	41590768	26.469	26.817
32	26.949	BV	0.105	1893082	26.828	26.990
33	27.105	VV	0.107	12805901	26.990	27.210
34	27.318	VV	0.093	11164925	27.210	27.359
35	27.409	VV	0.087	14045684	27.359	27.516
36	27.625	VV	0.087	21626694	27.516	27.687
37	27.730	VV	0.092	18252484	27.687	27.811
38	27.940	VV	0.099	227412484	27.811	28.094
39	28.115	VV	0.105	8011419	28.094	28.310
40	28.435	VV	0.087	2258535	28.310	28.459
41	28.582	VV	0.112	6923693	28.459	28.673
42	28.821	VV	0.099	11973625	28.673	28.907
43	28.997	VV	0.099	14546614	28.907	29.115
44	29.232	VV	0.118	11502684	29.115	29.315
45	29.344	VV	0.098	4902283	29.315	29.478
46	29.756	VV	0.116	13404288	29.588	29.925
47	30.048	PV	0.077	7235673	29.925	30.076
48	30.100	VV	0.059	5433455	30.076	30.136
49	30.192	VV	0.121	13863916	30.136	30.335
50	30.474	VV	0.181	54816328	30.335	30.729
51	30.783	VV	0.105	9831293	30.729	30.904
52	31.069	VV	0.093	2699135	31.027	31.184
53	31.394	BV	0.102	4913692	31.266	31.521
54	31.844	VV	0.185	30080735	31.670	32.149
55	32.526	VV	0.122	90158782	32.249	32.641
56	32.770	VV	0.126	102608126	32.641	32.976

TIC of DATA:U009A29A.D
WASTEX 871123.018 DF = 57.8 +100 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.461	BV	0.162	9473107	7.299	7.748
2	8.963	VV	0.103	7572141	8.838	9.437
3	10.854	BV	0.150	73143562	10.625	11.170
4	11.312	VB	0.117	18855672	11.170	11.631
5	12.045	BH	0.120	42566320	11.845	12.177
6	12.262	VH	0.109	13947098	12.177	12.422
7	12.690	PH	0.106	68858851	12.422	12.978
8	13.309	BV	0.093	6512207	13.203	13.387
9	13.473	VV	0.114	10600351	13.387	13.677
10	13.964	BV	0.107	46002525	13.823	14.219
11	14.398	PH	0.102	94111433	14.219	14.690
12	14.943	BB	0.092	2826614	14.850	15.054
13	16.305	BH	0.085	2155468	16.198	16.423
14	17.634	BH	0.110	395192352	17.385	17.942
15	18.169	PH	0.092	7033152	17.942	18.262
16	18.433	VH	0.122	26422140	18.262	18.599
17	18.726	VH	0.099	7085201	18.599	18.847
18	19.385	BH	0.108	2204812	19.279	19.518
19	20.536	VH	0.087	35034334	20.429	20.622
20	20.713	VH	0.086	57415267	20.622	20.862
21	21.379	VH	0.110	8778514	21.202	21.640
22	22.195	BH	0.083	8149797	22.060	22.275
23	22.313	VH	0.079	3151132	22.275	22.448
24	22.772	BH	0.110	185013121	22.595	22.887
25	22.935	VH	0.077	25602851	22.887	23.057
26	23.207	VH	0.118	44477489	23.057	23.359
27	23.827	BH	0.102	2091348	23.707	23.974
28	24.189	VH	0.082	4510816	24.079	24.338
29	25.650	PV	0.100	4696467	25.472	25.769
30	27.046	PB	0.104	4703367	26.955	27.177
31	27.392	BV	0.127	31406482	27.226	27.523
32	27.680	VV	0.147	55347226	27.523	27.920
33	30.436	BH	0.107	3505279	30.317	30.558
34	32.783	BV	0.123	16277602	32.639	32.952

SECTION 4.0
4-BROMOFLUOROBENZENE TUNING SPECTRA AND TUNING FORMS

GC/MS TUNING AND MASS CALIBRATION

Bromofluorobenzene (BFB)

Case No. WASTEX Contractor CAL TECHNOLOGIES Contract No. _____

Instrument ID 5970B Date 11/30/87 Time 18:38

Lab ID V009A14A.D Data Release Authorized By: TS 12/2/87

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of the base peak	20.6
75	30.0 - 60.0% of the base peak	45.5
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of the base peak	7.9
173	Less than 1.0% of the base peak	<1
174	Greater than 50.0% of the base peak	84.1
175	5.0 - 9.0% of mass 174	7.3 (8.6)[1]
176	Greater than 95.0%, but less than 101.0% of mass 174	82.3 (98)[1]
177	5.0 - 9.0% of mass 176	6.8 (8.3)[2]

[1] Value in parenthesis is % mass 174.
[2] Value in parenthesis is % mass 176.

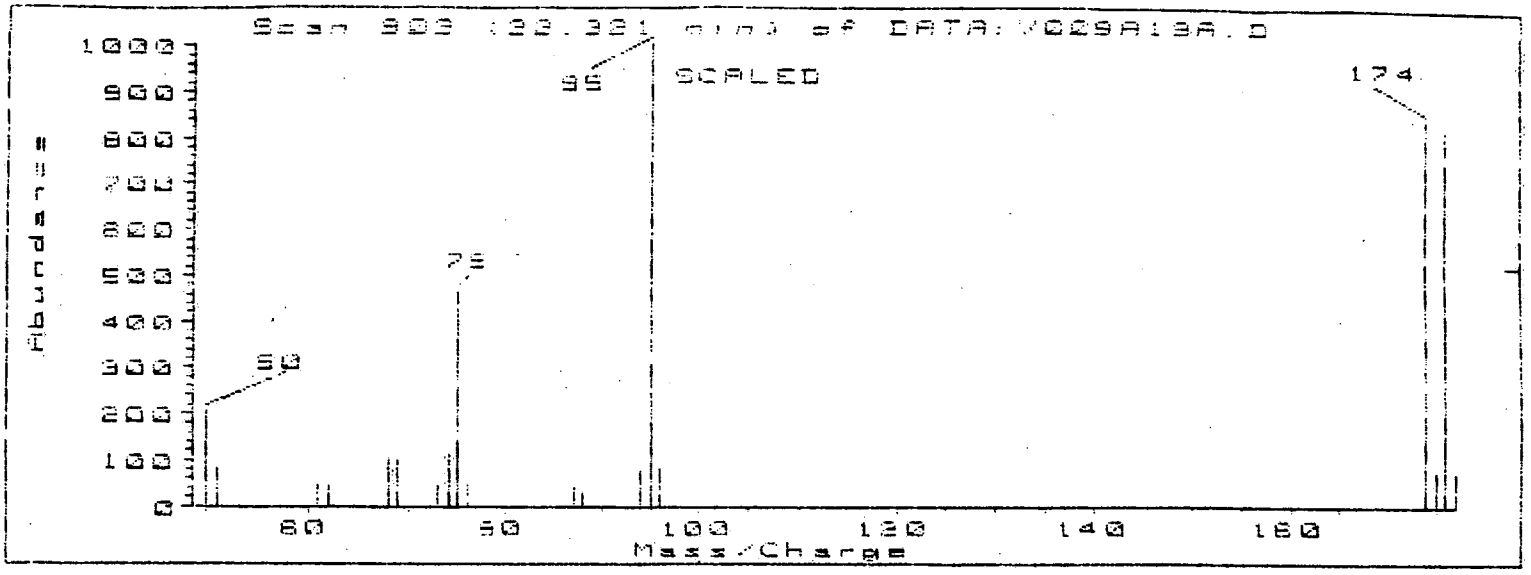
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Blank	V009A15A.D	11/30/87	16:11
16.7 PPB STD	V009A16A.D	"	16:45
33.4 PPB STD	V009A17A.D	"	17:20
50.1 PPB STD	V009A18A.D	"	11:58
66.7 PPB STD	V009A19A.D	"	18:38
83.4 PPB STD	V009A20A.D	"	19:14
871123.013	V009A21A.D	"	20:09
871120.044	V009A22A.D	"	20:54
871120.045	V009A23A.D	"	21:47
871120.045MS	V009A24A.D	"	22:31
871120.045MSD	V009A25A.D	"	23:15
871123.011	V009A26A.D	12/1/87	0:14
871123.017	V009A27A.D	"	3:16
871123.012	V009A28A.D	"	4:02
871123.018	V009A29A.D	"	4:37

4/84

FORM V

Form V. BFB Tuning and Mass Calibration.



Scan 903 (22.921 min) of DATA:V009A19A.D
VOLATILE STANDARD 66.7 PPB + 100 PPB ISS

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
48.90	50	83.00	103	76.00	48	95.90	79
50.00	206	83.90	99	87.00	40	173.90	841
50.90	79	72.90	46	87.90	46	174.90	73
60.90	44	74.00	115	94.00	75	175.90	823
62.00	43	75.00	465	95.00	1000	177.00	68

SECTION 5.0
CHAIN OF CUSTODY FORMS

WASTEX INDUSTRIES, INC.
28 South Hanover St.
Pottstown, PA 19464

87-889
87-890

CHAIN OF CUSTODY RECORD

CLIENT: U.S. EPA Region II
SITE LOCATION: Newark NJ
SAMPLERS: JC/BD

SAMPLE ID	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	No. of Containers	GC/MS Volatile	GC/MS BASE	GC/MS ACID					REMARKS/ANALYSES
87 1123.012	11/17	16:00	S	X			1	X	X	X					
013	11/17	8:00	[illegible]	X			1	X	X	X					
															Two week turnaround
TOTALS															

SAMPLE CONTAINERS PREPARED BY:	RELINQUISHED AT LABORATORY BY:	DATE/TIME	RECIEVED BY:
	Michelle D Diener	11/25 / 11:00	10:45 AM Tim Black 11/30/87

RELINQUISHED BY:	DATE/TIME	RECIEVED BY:	RELINQUISHED BY:	DATE/TIME	RECIEVED BY:

RELINQUISHED BY:	DATE/TIME	RECIEVED FOR LABORATORY BY:	DATE/TIME	REMARKS

WASTEX INDUSTRIES, INC.
28 South Hanover St.
Pottstown, PA 19464

CHAIN OF CUSTODY RECORD

CLIENT: U.S. EPA Region II
SITE LOCATION: Newark NJ
SAMPLERS: JC/BD

SAMPLE ID	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	No. of Containers	GC/MS Volatile	GC/MS BASE + ACID						REMARKS/ANALYSES
71123.011	11/18	9:00	S	X	~~X~~		1	+	+						
.017	11/17	13:00	L	X	X		1	+	+						
.018	11/18	10:30	S	X			1	+	+						Two week turnaround
TOTALS															

SAMPLE CONTAINERS PREPARED BY:	RELINQUISHED AT LABORATORY BY:	DATE/TIME	RECIEVED BY:
	Michelle D Dunier	11/21	[illegible]

RELINQUISHED BY:	DATE/TIME	RECIEVED BY:	RELINQUISHED BY:	DATE/TIME	RECIEVED BY:

RELINQUISHED BY:	DATE/TIME	RECIEVED FOR LABORATORY BY:	DATE/TIME	REMARKS

SECTION 1.0
LABORATORY CHRONICLE AND ANALYTICAL REPORTS FOR THE ANALYSIS OF SEMI-VOLATILE ORGANIC COMPOUNDS IN WASTE SAMPLES

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL. ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM4

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871123.011	DATE EXTRACTED	11/25/87
C.A.L. #	87-822	DATE ANALYZED	11/30/87
DATE REC.	11/24/87	ANALYST	SABATINO
GC/MS REF #	B009A12A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

TARGET COMPOUND	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Phenol	180-95-02	N.D. < 50	50
Bis(2-Chloroethyl) Ethyl	111-44-4	N.D. < 50	50
2-Chlorophenol	95-57-8	N.D. < 50	50
1,3-Dichlorobenzene	541-73-1	N.D. < 50	50
1.4-Dichlorobenzene	106-46-7	N.D. < 50	50
Benzyl Alcohol	100-51-6	N.D. < 100	100
1,2-Dichlorobenzene	95-50-1	N.D. < 50	50
2-Methylphenol	95-48-7	N.D. < 50	50
bis(2-Chloroisopropyl) Ether	39638-32-9	N.D. < 50	50
4-Methylphenol	106-44-5	N.D. < 50	50
N-Nitroso-Di-N-Propylamine	621-64-7	N.D. < 50	50
Hexachloroethane	67-72-1	N.D. < 50	50
Nitrobenzene	98-95-3	N.D. < 50	50
Isophorone	78-59-1	N.D. < 50	50
2-Nitrophenol	88-75-5	N.D. < 50	50
2,4-Dimethylphenol	105-67-9	N.D. < 50	50
Benzoic Acid	65-85-0	N.D. < 100	100
Bis(2-Chloroethoxy) Methane	111-91-1	N.D. < 50	50
2.4-Dichlorophenol	120-83-2	N.D. < 50	50
1.2.4-Trichlorobenzene	120-82-1	N.D. < 50	50
Naphthalene	91-20-3	N.D. < 50	50
4-Chloroaniline	106-47-8	N.D. < 100	100
Hexachlorobutadiene	87-68-3	N.D. < 50	50
4-Chloro-3-Methylphenol	59-50-7	N.D. < 50	50
2-Methylnaphthalene	91-57-6	N.D. < 50	50
Hexachlorocyclopentadiene	77-47-4	N.D. < 50	50
2.4.6-Trichlorophenol	88-06-2	N.D. < 50	50
2.4,5-Trichlorophenol	95-95-4	N.D. < 50	50
2-Chloronaphthalene	91-58-7	N.D. < 50	50
2-Nitroaniline	88-74-4	N.D. < 100	100
Dimethyl Phthalate	131-11-3	N.D. < 50	50
Acenapthylene	208-96-8	N.D. < 50	50
3-Nitroaniline	99-09-2	N.D. < 100	100
Acenaphthene	83-32-9	N.D. < 50	50
2,4-Dinitrophenol	51-28-5	N.D. < 100	100
4-Nitrophenol	100-02-7	N.D. < 100	100
Dibenzofuran	132-64-9	N.D. < 50	50
2,4-Dinitrotoluene	121-14-2	N.D. < 50	50
2.6-Dinitrotoluene	606-20-2	N.D. < 50	50
Diethylphthalate	84-66-2	N.D. < 50	50
4-Chlorophenyl Phenyl Ether	7005-72-3	N.D. < 50	50

GC/MS REF B009A12A.D

COMPOUNDS CONTINUED	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Fluorene	86-73-7	N.D. < 50	50
4-Nitroaniline	100-01-6	N.D. < 100	100
4,6-Dinitro-2-Methylphenol	534-52-1	N.D. < 100	100
N-Nitrosodiphenylamine	86-30-6	N.D. < 50	50
4-Bromophenyl Phenyl Ether	101-55-3	N.D. < 50	50
Hexachlorobenzene	118-74-1	N.D. < 50	50
Pentachorophenol	87-86-5	N.D. < 100	100
Phenanthrene	85-01-8	N.D. < 50	50
Anthracene	120-12-7	N.D. < 50	50
Di-n-Butylphthalate	84-74-2	N.D. < 50	50
Fluoranthene	206-44-0	N.D. < 50	50
Pyrene	129-00-0	N.D. < 50	50
Butyl Benzyl Phthalate	85-68-7	N.D. < 50	50
3,3'-Dichlorobenzidine	91-94-1	N.D. < 100	100
Benzo(a)Anthracene	56-55-3	N.D. < 50	50
Bis(2-Ethylhexy)Phthalate	117-81-7	N.D. < 50	50
Chrysene	218-01-9	N.D. < 50	50
Di-n-octyl Phthalate	117-84-0	N.D. < 50	50
Benzo(b)Fluoranthene	205-99-2	N.D. < 50	50
Benzo(k)Fluoranthene	207-08-9	N.D. < 50	50
Benzo(a)Pyrene	50-32-8	N.D. < 50	50
Indeno(1,2,3-cd)Pyrene	193-39-5	N.D. < 50	50
Dibenz(a,h)Anthracene	53-70-3	N.D. < 50	50
Benzo(g,h,i)Perylene	191-24-2	N.D. < 50	50

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	71
DECAFLUOROBIPHENYL	2000	105
1-FLUORONAPHTHALENE	2000	92
2,2'-DIFLUOROBIPHENYL	2000	110
4,4'-DIBROMOBIPHENYL	2000	105
D-14 4-TERPHENYL	2000	89

GC/MS REF B009A12A.D

NONTARGET COMPOUNDS	RETENTION TIME, MIN	MAJOR ION	CONCENTRATION MG/KG (1)

NOT REQUESTED BY CLIENT

(1) CONCENTRATION CALCULATED AS RECEIVED (WATER INSOLUBLE WASTE)
(2) PRACTICAL QUANTITATION LIMITS BASED ON A 30 GRAM SAMPLE SIZE
(3) NONTARGET COMPOUNDS QUANTITATED RELATIVE TO PHENANTHRENE-D10'S RESPONSE FACTOR
(4) PARENT ION NOT FOUND IN EI MASS SPECTRA

Thomas Sabatino
C.A.L. Technologies Inc.

GC/MS REFERENCE # B009A12A.D

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR SEMIVILATILE ORGANIC COMPOUND ANALYSIS

Method 8270 is used to qualitatively identify and quantitate, using extracted ion profiles, semivolatile organic compounds in extracts prepared from all types of solid waste matrices, soils and ground water. Direct injection of a sample may be used in limited applications.

Method 8270 can be used to quantitate most neutral, acidic and basic organic compounds that are soluble in methylene chloride and capable of being separated without derivatization as sharp chromatogaphic components from a gas chromatograph utilizing a fused silica capillary column coated with a slightly polar organosilane stationary phase. Organic compound classes which are analyzed by this procedure include the following: polynuclear aromatic hydrocarbons, chlorinated hydrocarbons, organochlorine pesticides, phthalate esters, organophosphate esters, nitrosoamines, haloethers, aldehydes, ethers, hetones, anilines, pyridines, quinolines, substituted nitroaromatic compounds and phenols.

The following individual organic compounds may require special treatment when being analyzed by this method. Benzidine can be subject to oxidative losses during extract concentration. chromatography is also very poor for this compound. Using alkaline conditions fro base/ neutral extraction of aqueous samples; Alpha-BHC, Lindane, Endosulfan I and II, and Endrin are subject to decomposition. Neutral extraction conditions should be employed if these compounds are expected. Hexachlorocyclopentadiene is subject to thermal decompositon in the inlet of the gas chromatograph. chemical reaction in acetone solution and photochemical decomposition. N-nitrosodimethyl amine is difficult to separate from the solvent under the chromatographic conditions described in this analytical procedure. N-nitrosodiphenyl amine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine. Pentachlorophenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-Methyphenol, 4-Chloro-3-Methylphenol, Benzoic Acid, 2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline and Benzyl Alconol are subject to Erratic chromatographic behavior, especially if the gas chromatographic system is contaminated with high boiling or polymeric materials from the sample extract.

The Practical Qunatitation Limit (PQL) of Method 8270 for the determination of an individual semivolatile compound is approximately 1 MG/KG (wet weight) for soil/ sediment matrices (low level), 1 to 200 MG/KG for waste samples (depending on the matrix and method of sample preparation) and 10 UG/L for ground water samples. PQLs will be proportionately higher for sample extracts that require dilution to avoid saturation of the analytical system.

Method 8270 is restricted to use by or under the supervision of analysts experienced in the use of gas chromatography/ mass spectrometer systems and skilled in the interpretation of mass spectra. Each analyst must demonstrate the ability to generate acceptable results with this analytical procedure.

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM4

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	LIQUID WASTE
SAMPLE #	871123.012	DATE EXTRACTED	11/30/87
C.A.L. #	87-889	DATE ANALYZED	11/30/87
DATE REC.	11/30/87	ANALYST	SABATINO
GC/MS REF #	B009A10A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

TARGET COMPOUND	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Phenol	180-95-02	N.D. < 50	50
Bis(2-Chloroethyl) Ethyl	111-44-4	N.D. < 50	50
2-Chlorophenol	95-57-8	N.D. < 50	50
1,3-Dichlorobenzene	541-73-1	N.D. < 50	50
1,4-Dichlorobenzene	106-46-7	N.D. < 50	50
Benzyl Alcohol	100-51-6	N.D. < 100	100
1,2-Dichlorobenzene	95-50-1	N.D. < 50	50
2-Methylphenol	95-48-7	N.D. < 50	50
bis(2-Chloroisopropyl) Ether	39638-32-9	N.D. < 50	50
4-Methylphenol	106-44-5	N.D. < 50	50
N-Nitroso-Di-N-Propylamine	621-64-7	N.D. < 50	50
Hexachloroethane	67-72-1	N.D. < 50	50
Nitrobenzene	98-95-3	N.D. < 50	50
Isophorone	78-59-1	N.D. < 50	50
2-Nitrophenol	88-75-5	N.D. < 50	50
2,4-Dimethylphenol	105-67-9	N.D. < 50	50
Benzoic Acid	65-85-0	N.D. < 100	100
Bis(2-Chloroethoxy) Methane	111-91-1	N.D. < 50	50
2,4-Dichlorophenol	120-83-2	N.D. < 50	50
1,2,4-Trichlorobenzene	120-82-1	N.D. < 50	50
Naphthalene	91-20-3	30.6	50
4-Chloroaniline	106-47-8	N.D. < 100	100
Hexachlorobutadiene	87-68-3	N.D. < 50	50
4-Chloro-3-Methylphenol	59-50-7	N.D. < 50	50
2-Methylnaphthalene	91-57-6	N.D. < 50	50
Hexachlorocyclopentadiene	77-47-4	N.D. < 50	50
2,4,6-Trichlorophenol	88-06-2	N.D. < 50	50
2,4,5-Trichlorophenol	95-95-4	N.D. < 50	50
2-Chloronaphthalene	91-58-7	N.D. < 50	50
2-Nitroaniline	88-74-4	N.D. < 100	100
Dimethyl Phthalate	131-11-3	N.D. < 50	50
Acenapthylene	208-96-8	N.D. < 50	50
3-Nitroaniline	99-09-2	N.D. < 100	100
Acenaphthene	83-32-9	N.D. < 50	50
2,4-Dinitrophenol	51-28-5	N.D. < 100	100
4-Nitrophenol	100-02-7	N.D. < 100	100
Dibenzofuran	132-64-9	N.D. < 50	50
2,4-Dinitrotoluene	121-14-2	N.D. < 50	50
2,6-Dinitrotoluene	606-20-2	N.D. < 50	50
Diethylphthalate	84-66-2	N.D. < 50	50
4-Chlorophenyl Phenyl Ether	7005-72-3	N.D. < 50	50

GC/MS REF B009A10A.D

COMPOUNDS CONTINUED	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Fluorene	86-73-7	N.D. < 50	50
4-Nitroaniline	100-01-6	N.D. < 100	100
4,6-Dinitro-2-Methylphenol	534-52-1	N.D. < 100	100
N-Nitrosodiphenylamine	86-30-6	N.D. < 50	50
4-Bromophenyl Phenyl Ether	101-55-3	N.D. < 50	50
Hexachlorobenzene	118-74-1	N.D. < 50	50
Pentachorophenol	87-86-5	N.D. < 100	100
Phenanthrene	85-01-8	N.D. < 50	50
Anthracene	120-12-7	N.D. < 50	50
Di-n-Butylphthalate	84-74-2	N.D. < 50	50
Fluoranthene	206-44-0	N.D. < 50	50
Pyrene	129-00-0	N.D. < 50	50
Butyl Benzyl Phthalate	85-68-7	N.D. < 50	50
3,3'-Dichlorobenzidine	91-94-1	N.D. < 100	100
Benzo(a)Anthracene	56-55-3	N.D. < 50	50
Bis(2-Ethylhexy)Phthalate	117-81-7	N.D. < 50	50
Chrysene	218-01-9	N.D. < 50	50
Di-n-octyl Phthalate	117-84-0	N.D. < 50	50
Benzo(b)Fluoranthene	205-99-2	N.D. < 50	50
Benzo(k)Fluoranthene	207-08-9	N.D. < 50	50
Benzo(a)Pyrene	50-32-8	N.D. < 50	50
Indeno(1,2,3-cd)Pyrene	193-39-5	N.D. < 50	50
Dibenz(a,h)Anthracene	53-70-3	N.D. < 50	50
Benzo(g,h,i)Perylene	191-24-2	N.D. < 50	50

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	46
DECAFLUOROBIPHENYL	2000	112
1-FLUORONAPHTHALENE	2000	97
2,2'-DIFLUOROBIPHENYL	2000	112
4,4'-DIBROMOBIPHENYL	2000	102
D-14 4-TERPHENYL	2000	91

GC/MS REF B009A10A.D

NONTARGET COMPOUNDS	RETENTION TIME, MIN	MAJOR ION	CONCENTRATION MG/KG (1)

NOT REQUESTED BY CLIENT

(1) CONCENTRATION CALCULATED AS RECEIVED (WATER INSOLUBLE WASTE)
(2) PRACTICAL QUANTITATION LIMITS BASED ON A 30 GRAM SAMPLE SIZE
(3) NONTARGET COMPOUNDS QUANTITATED RELATIVE TO PHENANTHRENE-D10'S RESPONSE FACTOR
(4) PARENT ION NOT FOUND IN EI MASS SPECTRA

Thomas Sabatino
C.A.L. Technologies Inc.

GC/MS REFERENCE # B009A10A.D

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR SEMIVILATILE ORGANIC COMPOUND ANALYSIS

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The following individual organic compounds may require special treatment when being analyzed by this method. Benzidine can be subject to oxidative losses during extract concentration, chromatography is also very poor for this compound. Using alkaline conditions fro base/ neutral extraction of aqueous samples; Alpha-BHC, Lindane, Endosulfan I and II, and Endrin are subject to decomposition. Neutral extraction conditions should be employed if these compounds are expected. Hexachlorocyclopentadiene is subject to thermal decompositon in the inlet of the gas chromatograph, chemical reaction in acetone solution and photochemical decomposition. N-nitrosodimethyl amine is difficult to separate from the solvent under the chromatographic conditions described in this analytical procedure. N-nitrosodiphenyl amine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine. Pentachlorophenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-Methyphenol, 4-Chloro-3-Methylphenol, Benzoic Acid, 2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline and Benzyl Alconol are subject to Erratic chromatographic behavior, especially if the gas chromatographic system is contaminated with high boiling or polymeric materials from the sample extract.

The Practical Qunatitation Limit (PQL) of Method 8270 for the determination of an individual semivolatile compound is approximately 1 MG/KG (wet weight) for soil/ sediment matrices (low level), 1 to 200 MG/KG for waste samples (depending on the matrix and method of sample preparation) and 10 UG/L for ground water samples. PQLs will be proportionately higher for sample extracts that require dilution to avoid saturation of the analytical system.

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ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM4

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	LIQUID WASTE
SAMPLE #	871123.013	DATE EXTRACTED	11/30/87
C.A.L. #	87-890	DATE ANALYZED	11/30/87
DATE REC.	11/30/87	ANALYST	SABATINO
GC/MS REF #	B009A11A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

TARGET COMPOUND	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Phenol	180-95-02	N.D. < 50	50
Bis(2-Chloroethyl) Ethyl	111-44-4	N.D. < 50	50
2-Chlorophenol	95-57-8	N.D. < 50	50
1,3-Dichlorobenzene	541-73-1	N.D. < 50	50
1,4-Dichlorobenzene	106-46-7	N.D. < 50	50
Benzyl Alcohol	100-51-6	N.D. < 100	100
1,2-Dichlorobenzene	95-50-1	N.D. < 50	50
2-Methylphenol	95-48-7	N.D. < 50	50
bis(2-Chloroisopropyl) Ether	39638-32-9	407	50
4-Methylphenol	106-44-5	N.D. < 50	50
N-Nitroso-Di-N-Propylamine	621-64-7	N.D. < 50	50
Hexachloroethane	67-72-1	N.D. < 50	50
Nitrobenzene	98-95-3	654	50
Isophorone	78-59-1	N.D. < 50	50
2-Nitrophenol	88-75-5	N.D. < 50	50
2,4-Dimethylphenol	105-67-9	N.D. < 50	50
Benzoic Acid	65-85-0	N.D. < 100	100
Bis(2-Chloroethoxy) Methane	111-91-1	N.D. < 50	50
2,4-Dichlorophenol	120-83-2	N.D. < 50	50
1,2,4-Trichlorobenzene	120-82-1	N.D. < 50	50
Naphthalene	91-20-3	508	50
4-Chloroaniline	106-47-8	N.D. < 100	100
Hexachlorobutadiene	87-68-3	N.D. < 50	50
4-Chloro-3-Methylphenol	59-50-7	N.D. < 50	50
2-Methylnaphthalene	91-57-6	N.D. < 50	50
Hexachlorocyclopentadiene	77-47-4	N.D. < 50	50
2,4,6-Trichlorophenol	88-06-2	N.D. < 50	50
2,4,5-Trichlorophenol	95-95-4	N.D. < 50	50
2-Chloronaphthalene	91-58-7	N.D. < 50	50
2-Nitroaniline	88-74-4	N.D. < 100	100
Dimethyl Phthalate	131-11-3	54	50
Acenapthylene	208-96-8	N.D. < 50	50
3-Nitroaniline	99-09-2	N.D. < 100	100
Acenaphthene	83-32-9	N.D. < 50	50
2,4-Dinitrophenol	51-28-5	N.D. < 100	100
4-Nitrophenol	100-02-7	N.D. < 100	100
Dibenzofuran	132-64-9	N.D. < 50	50
2,4-Dinitrotoluene	121-14-2	N.D. < 50	50
2,6-Dinitrotoluene	606-20-2	N.D. < 50	50
Diethylphthalate	84-66-2	N.D. < 50	50
4-Chlorophenyl Phenyl Ether	7005-72-3	N.D. < 50	50

GC/MS REF B009A11A.D

COMPOUNDS CONTINUED	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Fluorene	86-73-7	N.D. < 50	50
4-Nitroaniline	100-01-6	N.D. < 100	100
4,6-Dinitro-2-Methylphenol	534-52-1	N.D. < 100	100
N-Nitrosodiphenylamine	86-30-6	N.D. < 50	50
4-Bromophenyl Phenyl Ether	101-55-3	N.D. < 50	50
Hexachlorobenzene	118-74-1	N.D. < 50	50
Pentachorophenol	87-86-5	N.D. < 100	100
Phenanthrene	85-01-8	N.D. < 50	50
Anthracene	120-12-7	N.D. < 50	50
Di-n-Butylphthalate	84-74-2	N.D. < 50	50
Fluoranthene	206-44-0	N.D. < 50	50
Pyrene	129-00-0	N.D. < 50	50
Butyl Benzyl Phthalate	85-68-7	N.D. < 50	50
3,3'-Dichlorobenzidine	91-94-1	N.D. < 100	100
Benzo(a)Anthracene	56-55-3	N.D. < 50	50
Bis(2-Ethylhexy)Phthalate	117-81-7	N.D. < 50	50
Chrysene	218-01-9	N.D. < 50	50
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Indeno(1,2,3-cd)Pyrene	193-39-5	N.D. < 50	50
Dibenz(a,h)Anthracene	53-70-3	N.D. < 50	50
Benzo(g,h,i)Perylene	191-24-2	N.D. < 50	50

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	52
DECAFLUOROBIPHENYL	2000	121
1-FLUORONAPHTHALENE	2000	99
2,2'-DIFLUOROBIPHENYL	2000	111
4,4'-DIBROMOBIPHENYL	2000	89
D-14 4-TERPHENYL	2000	88

GC/MS REF B009A11A.D

NONTARGET COMPOUNDS	RETENTION TIME, MIN	MAJOR ION	CONCENTRATION MG/KG (1)

NOT REQUESTED BY CLIENT

(1) CONCENTRATION CALCULATED AS RECEIVED (WATER INSOLUBLE WASTE)
(2) PRACTICAL QUANTITATION LIMITS BASED ON A 30 GRAM SAMPLE SIZE
(3) NONTARGET COMPOUNDS QUANTITATED RELATIVE TO PHENANTHRENE-D10'S RESPONSE FACTOR
(4) PARENT ION NOT FOUND IN EI MASS SPECTRA

Thomas Sabatino
C.A.L. Technologies Inc.

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR SEMIVILATILE ORGANIC COMPOUND ANALYSIS

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ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM4

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	LIQUID WASTE
SAMPLE #	871123.017	DATE EXTRACTED	11/25/87
C.A.L. #	87-823	DATE ANALYZED	11/30/87
DATE REC.	11/24/87	ANALYST	SABATINO
GC/MS REF #	B009A13A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

TARGET COMPOUND	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Phenol	180-95-02	N.D. < 50	50
Bis(2-Chloroethyl) Ethyl	111-44-4	N.D. < 50	50
2-Chlorophenol	95-57-8	N.D. < 50	50
1,3-Dichlorobenzene	541-73-1	N.D. < 50	50
1,4-Dichlorobenzene	106-46-7	N.D. < 50	50
Benzyl Alcohol	100-51-6	N.D. < 100	100
1,2-Dichlorobenzene	95-50-1	N.D. < 50	50
2-Methylphenol	95-48-7	N.D. < 50	50
bis(2-Chloroisopropyl) Ether	39638-32-9	N.D. < 50	50
4-Methylphenol	106-44-5	N.D. < 50	50
N-Nitroso-Di-N-Propylamine	621-64-7	N.D. < 50	50
Hexachloroethane	67-72-1	N.D. < 50	50
Nitrobenzene	98-95-3	N.D. < 50	50
Isophorone	78-59-1	N.D. < 50	50
2-Nitrophenol	88-75-5	N.D. < 50	50
2,4-Dimethylphenol	105-67-9	N.D. < 50	50
Benzoic Acid	65-85-0	N.D. < 100	100
Bis(2-Chloroethoxy) Methane	111-91-1	N.D. < 50	50
2,4-Dichlorophenol	120-83-2	N.D. < 50	50
1,2,4-Trichlorobenzene	120-82-1	N.D. < 50	50
Naphthalene	91-20-3	N.D. < 50	50
4-Chloroaniline	106-47-8	N.D. < 100	100
Hexachlorobutadiene	87-68-3	N.D. < 50	50
4-Chloro-3-Methylphenol	59-50-7	N.D. < 50	50
2-Methylnaphthalene	91-57-6	N.D. < 50	50
Hexachlorocyclopentadiene	77-47-4	N.D. < 50	50
2,4,6-Trichlorophenol	88-06-2	N.D. < 50	50
2,4,5-Trichlorophenol	95-95-4	N.D. < 50	50
2-Chloronaphthalene	91-58-7	N.D. < 50	50
2-Nitroaniline	88-74-4	N.D. < 100	100
Dimethyl Phthalate	131-11-3	N.D. < 50	50
Acenapthylene	208-96-8	N.D. < 50	50
3-Nitroaniline	99-09-2	N.D. < 100	100
Acenaphthene	83-32-9	N.D. < 50	50
2,4-Dinitrophenol	51-28-5	N.D. < 100	100
4-Nitrophenol	100-02-7	N.D. < 100	100
Dibenzofuran	132-64-9	N.D. < 50	50
2,4-Dinitrotoluene	121-14-2	N.D. < 50	50
2,6-Dinitrotoluene	606-20-2	N.D. < 50	50
Diethylphthalate	84-66-2	N.D. < 50	50
4-Chlorophenyl Phenyl Ether	7005-72-3	N.D. < 50	50

GC/MS REF B009A13A.D

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4,6-Dinitro-2-Methylphenol	534-52-1	N.D. < 100	10
N-Nitrosodiphenylamine	86-30-6	N.D. < 50	5
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Hexachlorobenzene	118-74-1	N.D. < 50	5
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Pyrene	129-00-0	N.D. < 50	5
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3,3'-Dichlorobenzidine	91-94-1	N.D. < 100	100
Benzo(a)Anthracene	56-55-3	N.D. < 50	5
Bis(2-Ethylhexy)Phthalate	117-81-7	N.D. < 50	5
Chrysene	218-01-9	N.D. < 50	5
Di-n-octyl Phthalate	117-84-0	N.D. < 50	5
Benzo(b)Fluoranthene	205-99-2	N.D. < 50	5
Benzo(k)Fluoranthene	207-08-9	N.D. < 50	5
Benzo(a)Pyrene	50-32-8	N.D. < 50	5
Indeno(1,2,3-cd)Pyrene	193-39-5	N.D. < 50	5
Dibenz(a,h)Anthracene	53-70-3	N.D. < 50	5
Benzo(g,h,i)Perylene	191-24-2	N.D. < 50	5

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	75
DECAFLUOROBIPHENYL	2000	100
1-FLUORONAPHTHALENE	2000	86
2,2'-DIFLUOROBIPHENYL	2000	103
4,4'-DIBROMOBIPHENYL	2000	98
D-14 4-TERPHENYL	2000	85

FORM: BNFORM4

GC/MS REF B009A13A.D

NONTARGET COMPOUNDS	RETENTION TIME, MIN	MAJOR ION	CONCENTRATION MG/KG (1)

NOT REQUESTED BY CLIENT

(1) CONCENTRATION CALCULATED AS RECEIVED (WATER INSOLUBLE WASTE)
(2) PRACTICAL QUANTITATION LIMITS BASED ON A 30 GRAM SAMPLE SIZE
(3) NONTARGET COMPOUNDS QUANTITATED RELATIVE TO PHENANTHRENE-D10'S RESPONSE FACTOR
(4) PARENT ION NOT FOUND IN EI MASS SPECTRA

Thomas Sabatino
C.A.L. Technologies Inc.

GC/MS REFERENCE # B009A13A.D

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR SEMIVILATILE ORGANIC COMPOUND ANALYSIS

Method 8270 is used to qualitatively identify and quantitate, using extracted ion profiles, semivolatile organic compounds in extracts prepared from all types of solid waste matrices, soils and ground water. Direct injection of a sample may be used in limited applications.

Method 8270 can be used to quantitate most neutral, acidic and basic organic compounds that are soluble in methylene chloride and capable of being separated without derivatization as sharp chromatogaphic components from a gas chromatograph utilizing a fused silica capillary column coated with a slightly polar organosilane stationary phase. Organic compound classes which are analyzed by this procedure include the following: polynuclear aromatic hydrocarbons, chlorinated hydrocarbons, organochlorine pesticides, phthalate esters, organophosphate esters, nitrosoamines, haloethers, aldehydes, ethers, hetones, anilines, pyridines, quinolines, substituted nitroaromatic compounds and phenols.

The following individual organic compounds may require special treatment when being analyzed by this method. Benzidine can be subject to oxidative losses during extract concentration, chromatography is also very poor for this compound. Using alkaline conditions fro base/ neutra extraction of aqueous samples; Alpha-BHC, Lindane, Endosulfan I and II, and Endrin are subject to decomposition. Neutral extraction conditions should be employed if these compounds are expected. Hexachlorocyclopentadiene is subject to thermal decompositon in the inlet of the gas chromatograph, chemical reaction in acetone solution and photochemical decomposition. N-nitrosodimethyl amine is difficult to separate from the solvent under the chromatographic conditions described in this analytical procedure. N-nitrosodiphenyl amine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine. Pentachlorophenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-Methyphenol, 4-Chloro-3-Methylphenol, Benzoic Acid, 2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline and Benzyl Alconol are subject to Erratic chromatographic behavior, especially if the gas chromatographic system is contaminated with high boiling or polymeric materials from the sample extract.

The Practical Qunatitation Limit (PQL) of Method 8270 for the determination of an individual semivolatile compound is approximately 1 MG/K (wet weight) for soil/ sediment matrices (low level), 1 to 200 MG/KG fo waste samples (depending on the matrix and method of sample preparation and 10 UG/L for ground water samples. PQLs will be proportionately higher for sample extracts that require dilution to avoid saturation of the analytical system.

Method 8270 is restricted to use by or under the supervision of analyst experienced in the use of gas chromatography/ mass spectrometer systems and skilled in the interpretation of mass spectra. Each analyst must demonstrate the ability to generate acceptable results with this analytical procedure.

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM4

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871123.018	DATE EXTRACTED	11/25/87
C.A.L. #	87-824	DATE ANALYZED	11/30/87
DATE REC.	11/24/87	ANALYST	SABATINO
GC/MS REF #	B009A14A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

TARGET COMPOUND	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Phenol	180-95-02	N.D. < 50	5
Bis(2-Chloroethyl) Ethyl	111-44-4	N.D. < 50	5
2-Chlorophenol	95-57-8	N.D. < 50	5
1,3-Dichlorobenzene	541-73-1	N.D. < 50	5
1,4-Dichlorobenzene	106-46-7	N.D. < 50	5
Benzyl Alcohol	100-51-6	N.D. < 100	10
1,2-Dichlorobenzene	95-50-1	N.D. < 50	5
2-Methylphenol	95-48-7	N.D. < 50	5
bis(2-Chloroisopropyl) Ether	39638-32-9	N.D. < 50	
4-Methylphenol	106-44-5	N.D. < 50	
N-Nitroso-Di-N-Propylamine	621-64-7	N.D. < 50	
Hexachloroethane	67-72-1	N.D. < 50	
Nitrobenzene	98-95-3	N.D. < 50	
Isophorone	78-59-1	N.D. < 50	
2-Nitrophenol	88-75-5	N.D. < 50	
2,4-Dimethylphenol	105-67-9	N.D. < 50	
Benzoic Acid	65-85-0	N.D. < 100	1
Bis(2-Chloroethoxy) Methane	111-91-1	N.D. < 50	
2,4-Dichlorophenol	120-83-2	N.D. < 50	
1,2,4-Trichlorobenzene	120-82-1	N.D. < 50	
Naphthalene	91-20-3	N.D. < 50	
4-Chloroaniline	106-47-8	N.D. < 100	1
Hexachlorobutadiene	87-68-3	N.D. < 50	
4-Chloro-3-Methylphenol	59-50-7	N.D. < 50	
2-Methylnaphthalene	91-57-6	N.D. < 50	
Hexachlorocyclopentadiene	77-47-4	N.D. < 50	
2,4,6-Trichlorophenol	88-06-2	N.D. < 50	
2,4,5-Trichlorophenol	95-95-4	N.D. < 50	
2-Chloronaphthalene	91-58-7	N.D. < 50	
2-Nitroaniline	88-74-4	N.D. < 100	1
Dimethyl Phthalate	131-11-3	N.D. < 50	
Acenapthylene	208-96-8	N.D. < 50	
3-Nitroaniline	99-09-2	N.D. < 100	1
Acenaphthene	83-32-9	N.D. < 50	
2,4-Dinitrophenol	51-28-5	N.D. < 100	1
4-Nitrophenol	100-02-7	N.D. < 100	1
Dibenzofuran	132-64-9	N.D. < 50	
2,4-Dinitrotoluene	121-14-2	N.D. < 50	
2,6-Dinitrotoluene	606-20-2	N.D. < 50	
Diethylphthalate	84-66-2	N.D. < 50	
4-Chlorophenyl Phenyl Ether	7005-72-3	N.D. < 50	

GC/MS REF B009A14A.D

COMPOUNDS CONTINUED	CAS NUMBER	CONCENTRATION MG/KG(1)	PQL(2) MG/KG
Fluorene	86-73-7	N.D. < 50	5
4-Nitroaniline	100-01-6	N.D. < 100	10
4,6-Dinitro-2-Methylphenol	534-52-1	N.D. < 100	10
N-Nitrosodiphenylamine	86-30-6	N.D. < 50	5
4-Bromophenyl Phenyl Ether	101-55-3	N.D. < 50	5
Hexachlorobenzene	118-74-1	N.D. < 50	5
Pentachorophenol	87-86-5	N.D. < 100	1
Phenanthrene	85-01-8	N.D. < 50	5
Anthracene	120-12-7	N.D. < 50	5
Di-n-Butylphthalate	84-74-2	N.D. < 50	5
Fluoranthene	206-44-0	N.D. < 50	5
Pyrene	129-00-0	N.D. < 50	5
Butyl Benzyl Phthalate	85-68-7	N.D. < 50	5
3,3'-Dichlorobenzidine	91-94-1	N.D. < 100	10
Benzo(a)Anthracene	56-55-3	N.D. < 50	5
Bis(2-Ethylhexy)Phthalate	117-81-7	N.D. < 50	
Chrysene	218-01-9	N.D. < 50	
Di-n-octyl Phthalate	117-84-0	N.D. < 50	
Benzo(b)Fluoranthene	205-99-2	N.D. < 50	
Benzo(k)Fluoranthene	207-08-9	N.D. < 50	
Benzo(a)Pyrene	50-32-8	N.D. < 50	
Indeno(1,2,3-cd)Pyrene	193-39-5	N.D. < 50	
Dibenz(a,h)Anthracene	53-70-3	N.D. < 50	
Benzo(g,h,i)Perylene	191-24-2	N.D. < 50	

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	68
DECAFLUOROBIPHENYL	2000	92
1-FLUORONAPHTHALENE	2000	91
2,2'-DIFLUOROBIPHENYL	2000	103
4,4'-DIBROMOBIPHENYL	2000	97
D-14 4-TERPHENYL	2000	82

GC/MS REF B009A14A.D

NONTARGET COMPOUNDS	RETENTION TIME, MIN	MAJOR ION	CONCENTRATION MG/KG (1)

NOT REQUESTED BY CLIENT

(1) CONCENTRATION CALCULATED AS RECEIVED (WATER INSOLUBLE WASTE)
(2) PRACTICAL QUANTITATION LIMITS BASED ON A 30 GRAM SAMPLE SIZE
(3) NONTARGET COMPOUNDS QUANTITATED RELATIVE TO PHENANTHRENE-D10'S RESPONSE FACTOR
(4) PARENT ION NOT FOUND IN EI MASS SPECTRA

Thomas Sabatino
C.A.L. Technologies Inc.

GC/MS REFERENCE # B009A14A.D

ANALYTICAL METHOD SUMMARY AND APPLICATIONS FOR SEMIVILATILE ORGANIC COMPOUND ANALYSIS

Method 8270 is used to qualitatively identify and quantitate, using extracted ion profiles, semivolatile organic compounds in extracts prepared from all types of solid waste matrices, soils and ground water. Direct injection of a sample may be used in limited applications.

Method 8270 can be used to quantitate most neutral, acidic and basic organic compounds that are soluble in methylene chloride and capable of being separated without derivatization as sharp chromatogaphic components from a gas chromatograph utilizing a fused silica capillary column coated with a slightly polar organosilane stationary phase. Organic compound classes which are analyzed by this procedure include the following: polynuclear aromatic hydrocarbons, chlorinated hydrocarbons, organochlorine pesticides, phthalate esters, organophosphate esters, nitrosoamines, haloethers, aldehydes, ethers, hetones, anilines, pyridines, quinolines, substituted nitroaromatic compounds and phenols.

The following individual organic compounds may require special treatment when being analyzed by this method. Benzidine can be subject to oxidative losses during extract concentration, chromatography is also very poor for this compound. Using alkaline conditions fro base/ neutra extraction of aqueous samples; Alpha-BHC, Lindane, Endosulfan I and II, and Endrin are subject to decomposition. Neutral extraction conditions should be employed if these compounds are expected. Hexachlorocyclopentadiene is subject to thermal decompositon in the inlet of the gas chromatograph, chemical reaction in acetone solution and photochemical decomposition. N-nitrosodimethyl amine is difficult to separate from the solvent under the chromatographic conditions described in this analytical procedure. N-nitrosodiphenyl amine decomposes in the gas chromatographic inlet and cannot be separated from Diphenylamine. Pentachlorophenol, 2,4-Dinitrophenol, 4-Nitrophenol, 4,6-Dinitro-2-Methyphenol, 4-Chloro-3-Methylphenol, Benzoic Acid, 2-Nitroaniline, 3-Nitroaniline, 4-Chloroaniline and Benzyl Alconol are subject to Erratic chromatographic behavior, especially if the gas chromatographic system is contaminated with high boiling or polymeric materials from the sample extract.

The Practical Qunatitation Limit (PQL) of Method 8270 for the determination of an individual semivolatile compound is approximately 1 MG/K (wet weight) for soil/ sediment matrices (low level), 1 to 200 MG/KG fo waste samples (depending on the matrix and method of sample preparation and 10 UG/L for ground water samples. PQLs will be proportionately higher for sample extracts that require dilution to avoid saturation of the analytical system.

Method 8270 is restricted to use by or under the supervision of analyst experienced in the use of gas chromatography/ mass spectrometer systems and skilled in the interpretation of mass spectra. Each analyst must demonstrate the ability to generate acceptable results with this analytical procedure.

SECTION 2.0

LABORATORY CHRONICLE AND ANALYTICAL REPORTS FOR THE ANALYSIS OF FORTIFIED DUPLICATE WASTE SAMPLES, SEMI-VOLATILE ORGANIC COMPOUNDS

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL, ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM9

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871120.044	DATE EXTRACTED	11/25/87
C.A.L. #	87-974MS	DATE ANALYZED	11/30/87
DATE REC.	11/24/87	ANALYST	SABATINO
GC/MS REF #	B009A07A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

FORTIFIED DUPLICATE SAMPLE

COMPOUND	CONCENTRATION ADDED	CONCENTRATION FOUND	% RECOVERY
NAPHTHALENE	2000	2114	106
ACENAPHTHYLENE	2000	1563	78
FLUORENE	2000	1920	96
ANTHRACENE	2000	1314	66
FLUORANTHENE	2000	1979	99
PYRENE	2000	2066	103
BENZO(A)ANTHRACENE	2000	675	34
CHRYSENE	2000	990	50

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	47
DECAFLUOROBIPHENYL	2000	116
1-FLUORONAPHTHALENE	2000	90
2,2'-DIFLUOROBIPHENYL	2000	101
4,4'-DIBROMOBIPHENYL	2000	112
D-14 4-TERPHENYL	2000	87

1) CONCENTRATION CALCULATED ON AS RECEIVED BASIS

Thomas Sabatino
C.A.L. Technologies Inc.

C.A.L. TECHNOLOGIES INC. ENVIRONMENTAL. ANALYTICAL LABORATORIES
19 ROSS STREET, SOMERVILLE, NEW JERSEY 08876, (201) 725-6927

ANALYSIS OF SEMIVOLATILE ORGANIC COMPOUNDS IN SOIL/ SEDIMENT
USING USEPA METHOD 8270, GAS CHROMATOGRAPHY/ MASS SPECTROSCOPY
FORM: BNFORM9

CLIENT	WASTEX INDUSTRIES INC.	MATRIX	WASTE SLUDGE
SAMPLE #	871120.044	DATE EXTRACTED	11/25/87
C.A.L. #	87-974MSD	DATE ANALYZED	11/30/87
DATE REC.	11/24/87	ANALYST	SABATINO
GC/MS REF #	B009A08A.D	REPORT DATE	12/17/87
% SOLIDS	SEE NOTE #1	DILUTION FACTOR	20.0

FORTIFIED DUPLICATE SAMPLE

COMPOUND	CONCENTRATION ADDED	CONCENTRATION FOUND	% RECOVERY
NAPHTHALENE	2000	2150	108
ACENAPHTHYLENE	2000	1872	94
FLUORENE	2000	1915	96
ANTHRACENE	2000	1269	63
FLUORANTHENE	2000	1965	98
PYRENE	2000	2026	101
BENZO(A)ANTHRACENE	2000	638	32
CHRYSENE	2000	983	49

SURROGATE COMPOUND RECOVERIES

SURROGATE	MG/KG ADDED	% RECOVERY
4-FLUOROANILINE	2000	50
DECAFLUOROBIPHENYL	2000	118
1-FLUORONAPHTHALENE	2000	98
2,2'-DIFLUOROBIPHENYL	2000	100
4,4'-DIBROMOBIPHENYL	2000	110
D-14 4-TERPHENYL	2000	88

1) CONCENTRATION CALCULATED ON AS RECEIVED BASIS

Thomas Sabatino
C.A.L. Technologies Inc.

57	33.149	UU	0.144	5495770	32.976	33.221
58	33.689	PU	0.109	3482773	33.572	33.798
59	33.942	UU	0.132	8298983	33.798	34.053
60	34.206	UU	0.050	1400346	34.158	34.221
61	34.316	UU	0.128	8198086	34.221	34.527
62	34.981	UU	0.135	10588498	34.851	35.157
63	35.706	PU	0.094	1402911	35.533	35.749
64	35.896	UU	0.077	4469036	35.749	35.921
65	35.936	UU	0.059	2551178	35.921	36.045
66	36.155	UU	0.106	2702431	36.045	36.267
67	36.563	BU	0.118	8704407	36.422	36.754
68	36.978	BU	0.097	4469843	36.829	37.115
69	37.657	BU	0.068	1617310	37.526	37.676
70	37.699	UU	0.066	1604134	37.676	37.824

Data file: DATA:V009A28A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871123.012 DF = 200 +1000 PPB ISS
Misc Info: 1600 EMV 0.50 MLS 1/2 HHS
Operator : T. SABATINO

Date : 1 Dec 87 4:02 am
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

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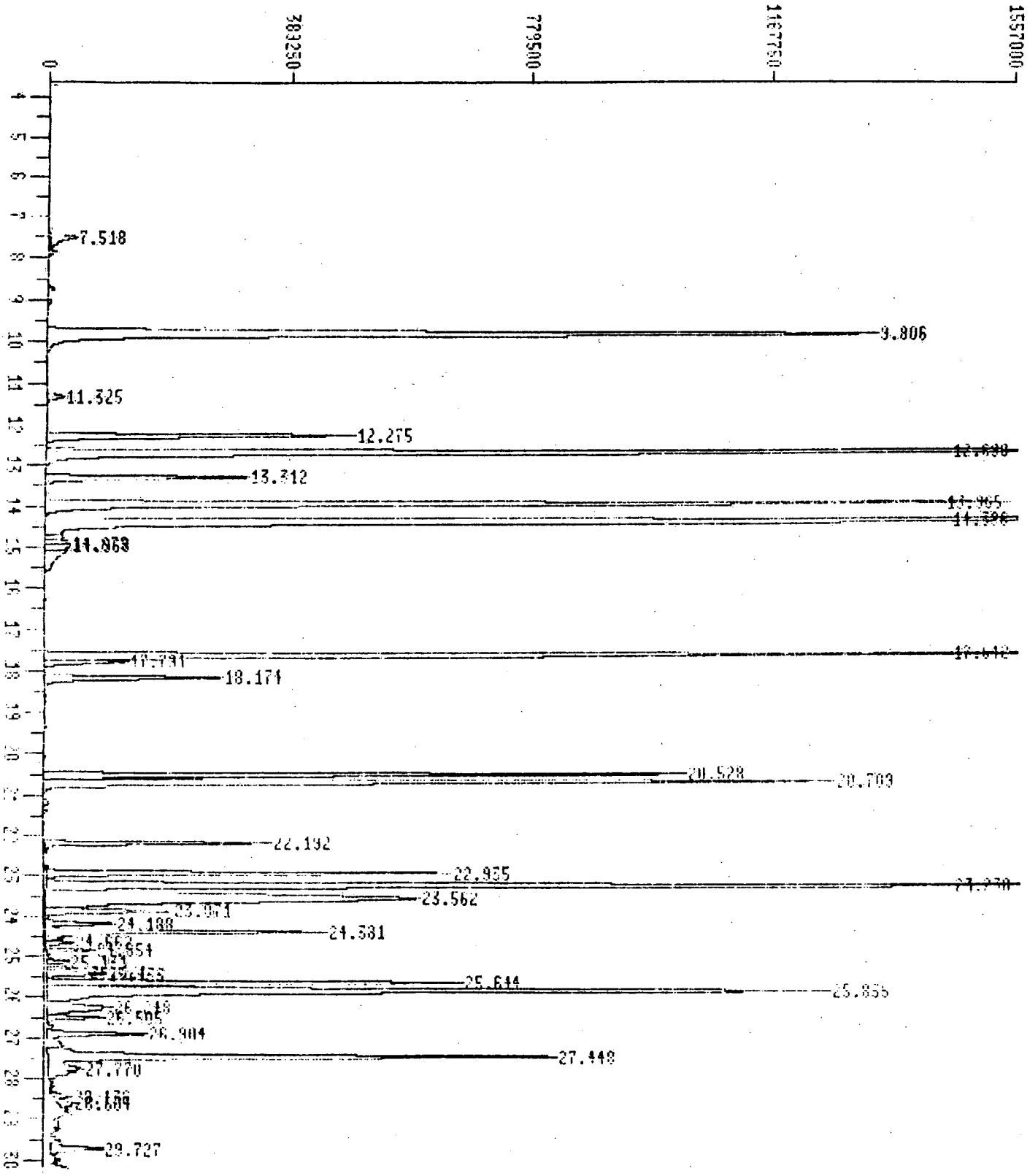

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TIC of DATA:V009A28A.D
WASTEX 871123.012 DF = 200 +1000 PPB ISS

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	7.518	BV	0.150	4290588	7.395	7.792
2	9.806	BH	0.121	106746994	9.620	10.273
3	11.325	BH	0.105	1784467	11.225	11.428
4	12.275	BH	0.086	27661041	12.123	12.434
5	12.698	BH	0.101	121672424	12.551	13.017
6	13.312	BH	0.095	19141827	13.193	13.503
7	13.965	BH	0.096	93965529	13.792	14.231
8	14.396	PH	0.098	192709140	14.231	14.712
9	14.879	VH	0.076	1790067	14.819	14.913
10	14.968	VH	0.113	3677745	14.913	15.078
11	17.642	BH	0.084	87027074	17.504	17.752
12	17.791	VH	0.080	6452242	17.752	17.921
13	18.174	BH	0.091	16665987	18.039	18.392
14	20.528	BH	0.080	50972094	20.339	20.617
15	20.709	VH	0.089	70590917	20.617	20.938
16	22.192	BV	0.079	17777044	22.083	22.382
17	22.935	BV	0.077	32131378	22.778	23.084
18	23.238	VV	0.099	106018795	23.084	23.358
19	23.562	VV	0.187	78596853	23.358	23.784
20	23.871	VV	0.097	12293570	23.784	23.981
21	24.188	PV	0.082	5878427	24.040	24.270
22	24.381	VV	0.091	26524875	24.270	24.599
23	24.662	VV	0.075	2343079	24.599	24.768
24	24.854	VV	0.071	3740894	24.768	24.983
25	25.131	VV	0.077	1723344	25.084	25.198
26	25.324	VV	0.075	1764515	25.255	25.345
27	25.433	VV	0.097	5914631	25.345	25.535
28	25.644	PV	0.081	35251306	25.535	25.731
29	25.835	VV	0.104	85214523	25.731	26.104
30	26.248	VV	0.145	11464386	26.104	26.435
31	26.505	VV	0.075	4295464	26.435	26.630
32	26.904	VV	0.079	8616623	26.781	27.050
33	27.448	VV	0.104	53462394	27.220	27.636
34	27.770	VV	0.171	7190421	27.636	28.015
35	28.436	PV	0.082	1758139	28.308	28.518
36	28.604	VV	0.113	1896678	28.518	28.715
37	29.727	VV	0.125	5971621	29.582	29.862

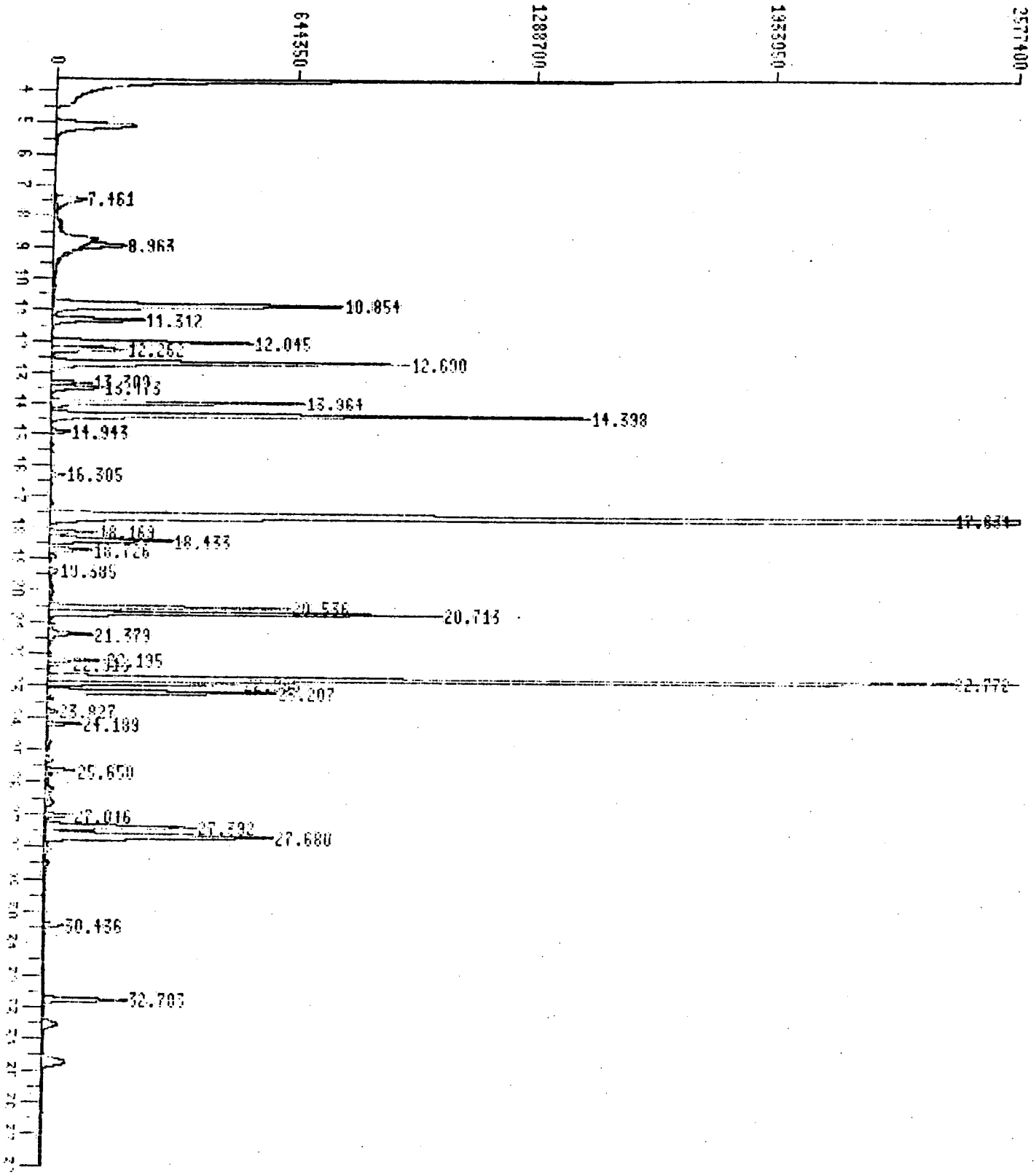
Data file: DATA:V009A29A.D
File type: GC / MS DATA FILE

Name Info: WASTEX 871123.018 DF = 57.8 +100 PPB ISS
Misc Info: 1600 EMV 5.0 MLS 1/2 HHS
Operator : T. SABATINO

Date : 1 Dec 87 4:37 am
Instrment: MS_5970
Inlet : GC

Sequence index : 0
Als bottle num : 0
Replicate num : 1

1: TIC of DATA:V009A29A.D



End of plot. Time = 3.63 to 38.01 minutes Chart speed = 0.52 cm/min

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eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.647	PB	0.045	17482392	4.594	4.957
2	5.067	BB	0.053	3368561	4.968	5.135
3	5.259	BH	0.046	3997241	5.202	5.403
4	7.782	BH	0.061	11235352	7.683	7.969
5	8.029	VH	0.068	9263755	7.969	8.141
6	8.425	BV	0.051	121447199	8.309	8.457
7	8.498	VV	0.049	94462506	8.457	8.615
8	9.029	BV	0.042	14970072	8.945	9.078
9	9.125	VV	0.062	7071394	9.078	9.213
10	9.256	VV	0.070	3107823	9.213	9.441
11	9.567	VV	0.071	3885073	9.441	9.711
12	9.879	BH	0.049	12678595	9.806	9.910
13	9.946	VH	0.049	5395182	9.910	10.085
14	10.177	PH	0.045	9143968	10.085	10.353
15	10.924	PV	0.055	24753175	10.783	11.067
16	11.155	VV	0.048	131011495	11.067	11.229
17	11.803	VV	0.068	12573073	11.745	12.014
18	12.160	PV	0.048	110714600	12.014	12.188
19	12.249	VV	0.045	195106695	12.188	12.394
20	12.613	BV	0.064	11421940	12.499	12.842
21	12.901	VV	0.053	17844831	12.842	13.035
22	14.340	BV	0.052	21570153	14.197	14.514
23	14.996	PV	0.111	15372917	14.704	15.054
24	15.106	VB	0.047	17842972	15.054	15.281
25	15.416	BB	0.039	2308253	15.314	15.493
26	15.667	BV	0.050	200914925	15.515	15.741
27	15.802	VB	0.059	26622750	15.741	15.951
28	16.363	VV	0.103	8459818	16.305	16.610
29	16.889	BH	0.045	957910	16.800	16.946
30	17.051	PV	0.038	24452939	16.946	17.110
31	17.165	VV	0.045	18908296	17.110	17.242
32	17.282	VB	0.046	10745459	17.242	17.426
33	17.566	BV	0.053	120891454	17.471	17.614
34	17.650	VV	0.055	39966119	17.614	17.872
35	17.956	VV	0.053	17480646	17.872	18.092
36	18.153	VV	0.041	26943916	18.092	18.353
37	18.464	PV	0.049	9448473	18.353	18.594
38	19.219	VV	0.045	25086177	19.147	19.318
39	19.385	PV	0.048	40312698	19.318	19.553
40	19.628	VV	0.099	6808502	19.553	19.745
41	19.810	VV	0.065	47032327	19.745	20.029
42	20.567	PV	0.048	9908461	20.475	20.800
43	20.855	VV	0.056	19156164	20.800	21.005
44	21.170	BB	0.044	27857710	21.069	21.263
45	21.937	BH	0.052	2047574	21.873	21.993
46	22.082	VH	0.058	187762961	21.993	22.196
47	22.266	VH	0.048	37621298	22.196	22.490
48	22.826	BH	0.047	4373379	22.745	22.923
49	24.856	PH	0.046	1744578	24.788	24.946
50	25.123	BH	0.050	222714618	25.024	25.411
51	25.840	BH	0.039	44060509	25.728	26.074
52	26.488	BH	0.047	52195248	26.409	26.665
53	26.712	VH	0.050	1357596	26.665	26.820
54	27.317	BV	0.061	234658844	27.180	27.518
55	29.125	BH	0.035	24760464	29.035	29.215
56	29.571	VH	0.046	841116	29.505	[illegible]

7	30.394	PU	0.076	29197752	30.248	30.665
8	31.186	PU	0.059	37923475	31.093	31.360
9	33.029	UU	0.052	33069368	32.943	33.185
0	33.545	UU	0.047	24748665	33.459	33.576
1	33.618	UU	0.064	30556058	33.576	33.845
2	34.512	UU	0.057	18275177	34.435	34.626
3	34.713	UU	0.063	68868061	34.626	35.080
4	39.042	BU	0.103	4428787	38.957	39.148
5	39.235	UU	0.101	5484909	39.148	39.396
6	40.284	BU	0.131	5807104	40.153	40.600

IC of DATA:B008A92A.D
/N 20 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMU

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.532	VV	0.039	884351	4.465	4.582
2	4.731	VV	0.053	19082529	4.672	4.978
3	5.135	PV	0.053	4076359	5.073	5.202
4	5.317	PV	0.043	5029420	5.202	5.408
5	7.802	BH	0.083	25439676	7.703	7.989
6	8.049	VH	0.058	20849862	7.989	8.228
7	8.433	BV	0.062	142568670	8.307	8.476
8	8.518	VV	0.052	120230416	8.476	8.678
9	9.033	BV	0.032	33304692	8.921	9.077
10	9.119	VV	0.062	17886260	9.077	9.229
11	9.257	VV	0.065	3694129	9.229	9.410
12	9.568	VV	0.044	4981925	9.500	9.593
13	9.613	VB	0.042	3863158	9.593	9.714
14	9.881	BH	0.036	29750047	9.758	9.918
15	9.948	VH	0.041	11573779	9.918	10.121
16	10.190	PH	0.047	19985235	10.121	10.376
17	10.686	BH	0.034	1049129	10.629	10.763
18	10.930	BV	0.076	38922201	10.853	11.067
19	11.156	VV	0.047	141124278	11.067	11.237
20	11.803	BH	0.041	27132746	11.668	12.020
21	12.095	PV	0.045	29608525	12.020	12.111
22	12.160	VV	0.045	95784331	12.111	12.186
23	12.248	VB	0.051	206634109	12.186	12.372
24	12.605	PV	0.066	22161553	12.556	12.842
25	12.900	VV	0.039	37470878	12.842	13.044
26	14.330	BH	0.046	38047680	14.237	14.415
27	14.440	VH	0.054	1522361	14.415	14.583
28	14.641	PH	0.040	719174	14.583	14.717
29	15.107	VV	0.050	31895826	14.951	15.208
30	15.403	VV	0.045	2099440	15.371	15.532
31	15.666	PV	0.045	178913867	15.532	15.730
32	15.799	VB	0.050	41258910	15.730	16.079
33	16.359	PH	0.056	12758819	16.309	16.621
34	16.878	BH	0.041	857643	16.794	16.928
35	17.051	PH	0.039	38385782	16.928	17.113
36	17.164	PH	0.043	27596368	17.113	17.231
37	17.279	VH	0.041	15899307	17.231	17.420
38	17.562	BH	0.048	101818733	17.453	17.603
39	17.645	VH	0.052	56496943	17.603	17.889
40	17.969	VH	0.061	5939678	17.889	18.078
41	18.153	VH	0.071	38360623	18.078	18.335
42	18.464	PH	0.053	13299263	18.335	18.596
43	19.213	VH	0.046	35014436	19.141	19.306
44	19.385	VH	0.048	56635140	19.306	19.560
45	19.630	VH	0.102	7427743	19.560	19.738
46	19.827	VH	0.071	62926974	19.738	20.100
47	20.568	PH	0.054	3323752	20.463	20.725
48	20.853	PH	0.058	26446408	20.725	21.088
49	21.169	PH	0.064	37070695	21.088	21.306
50	21.930	BH	0.050	2670258	21.842	21.983
51	22.065	VH	0.064	144154199	21.983	22.193
52	22.266	VH	0.077	45345775	22.193	22.473
53	22.826	BH	0.051	1515178	22.747	22.948
54	25.102	BH	0.037	140066709	24.958	25.360
55	25.838	BV	0.043	48250291	25.684	26.019
56	26.487	PV	0.095	56537899	26.254	[illegible]

58	29.122	BH	0.060	23880903	29.045	29.216
59	29.569	VH	0.043	641245	29.521	29.637
60	30.370	BH	0.065	135018435	30.229	30.402
61	30.439	VH	0.057	60917576	30.402	30.710
62	31.180	BV	0.035	35086540	31.089	31.316
63	33.013	PV	0.045	28970410	32.945	33.148
64	33.531	VV	0.050	23753549	33.435	33.571
65	33.612	VV	0.085	27091200	33.571	33.750
66	34.504	VV	0.063	20192777	34.272	34.641
67	34.701	VV	0.072	43316649	34.641	35.132
68	39.012	BV	0.099	8124875	38.896	39.130
69	39.208	VV	0.140	11396539	39.130	39.614
70	40.253	BB	0.152	9577263	40.146	40.783

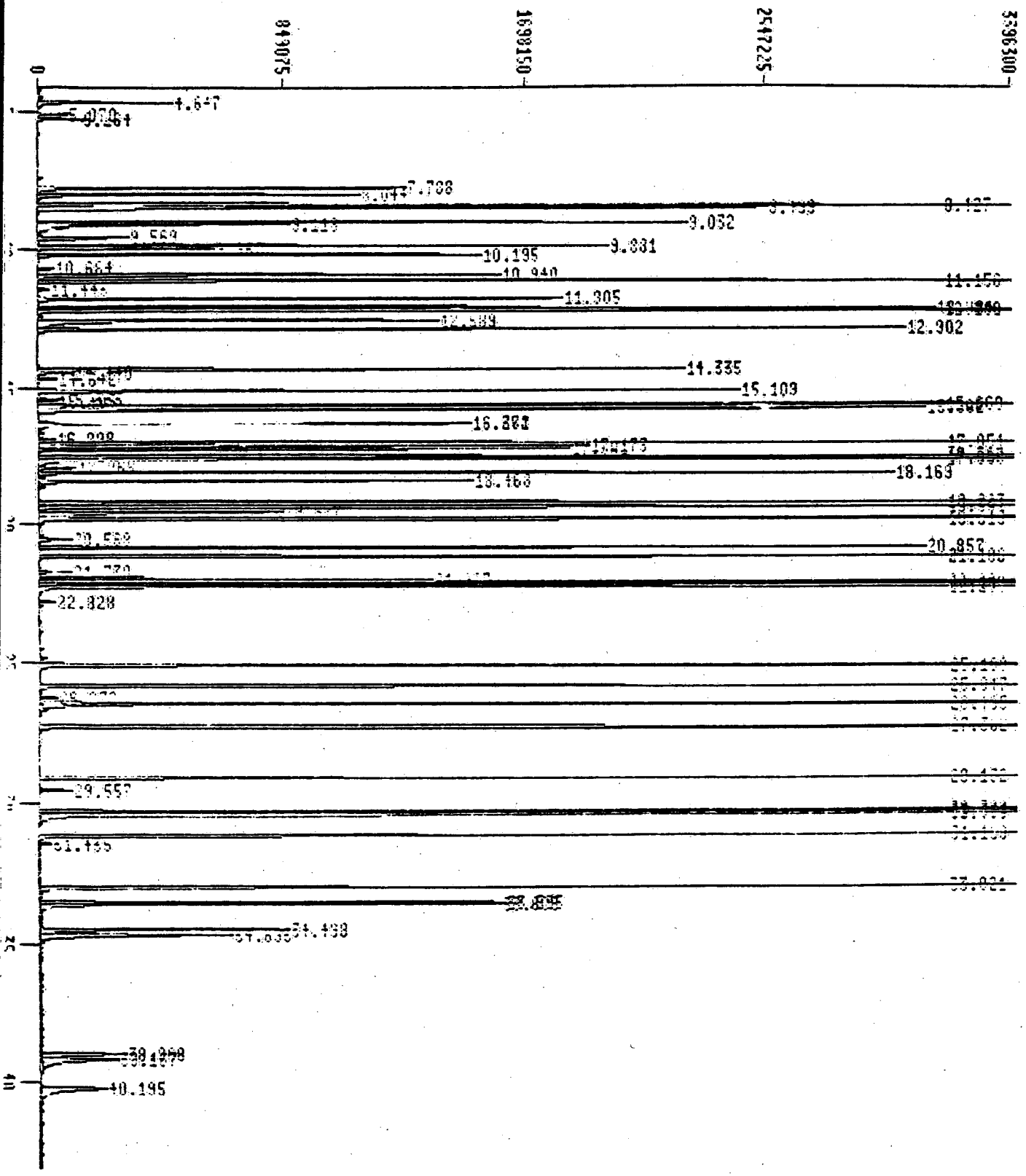
Data file: DATA:B008A93A.D
File type: GC / MS DATA FILE

Name Info: B/N 40 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMU
Misc Info:
Operator : T. SABATINO

Date : 29 Nov 87 10:53 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 93
Replicate num : 1

1: TIC of DATA:B608A93A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

TIC of DATA:B008A93A.D
B/N 40 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMV

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.647	PH	0.045	12976419	4.605	4.873
2	5.070	BV	0.038	2408950	5.035	5.158
3	5.264	PH	0.043	3564321	5.158	5.342
4	7.788	BH	0.048	39253172	7.716	7.969
5	8.044	VH	0.047	30676609	7.969	8.308
6	8.427	VH	0.060	135255727	8.308	8.458
7	8.499	VH	0.066	114152707	8.458	8.699
8	9.032	BH	0.047	47727129	8.956	9.074
9	9.118	VH	0.067	35557627	9.074	9.486
10	9.569	VH	0.074	14160959	9.486	9.800
11	9.881	PV	0.036	42682829	9.800	9.912
12	9.967	VB	0.051	20896851	9.912	10.067
13	10.195	BV	0.066	33451529	10.118	10.375
14	10.684	BH	0.048	1507952	10.632	10.755
15	10.940	BV	0.056	56668841	10.833	11.074
16	11.156	VV	0.065	115730325	11.074	11.249
17	11.443	BV	0.077	1309491	11.336	11.515
18	11.805	BH	0.066	40119323	11.660	12.017
19	12.094	VH	0.049	51460849	12.017	12.118
20	12.162	VH	0.044	82886776	12.118	12.185
21	12.249	VH	0.048	210755431	12.185	12.342
22	12.589	PH	0.051	44367392	12.537	12.838
23	12.902	VH	0.035	60793171	12.838	13.079
24	14.335	VH	0.049	70162403	14.258	14.401
25	14.440	VH	0.051	3733067	14.401	14.557
26	14.642	PV	0.055	1514449	14.557	14.710
27	15.109	BH	0.070	53612495	14.900	15.280
28	15.333	VH	0.045	768817	15.280	15.366
29	15.405	VH	0.044	2246287	15.366	15.470
30	15.668	BH	0.040	171459060	15.548	15.732
31	15.802	PH	0.044	82606762	15.732	16.017
32	16.271	BV	0.039	901125	16.218	16.294
33	16.362	VV	0.036	38841237	16.294	16.609
34	16.898	BH	0.036	970036	16.844	16.922
35	17.054	PH	0.038	80805575	16.922	17.106
36	17.173	PH	0.053	66328428	17.106	17.246
37	17.301	VH	0.036	40157537	17.246	17.395
38	17.567	BH	0.044	114271660	17.447	17.608
39	17.660	VH	0.045	131207823	17.608	17.890
40	17.965	VH	0.057	4716312	17.890	18.065
41	18.169	VH	0.047	89340004	18.065	18.255
42	18.468	PV	0.049	40936399	18.414	18.598
43	19.223	PH	0.039	83577418	19.151	19.308
44	19.391	PH	0.057	136374505	19.308	19.531
45	19.587	PH	0.077	36228992	19.531	19.743
46	19.819	VH	0.065	156566142	19.743	20.179
47	20.568	BH	0.051	3008900	20.497	20.732
48	20.857	BH	0.042	69980486	20.765	20.961
49	21.186	BV	0.049	103036379	21.067	21.290
50	21.730	BH	0.042	2499821	21.637	21.804
51	21.927	BH	0.044	9350950	21.860	21.989
52	22.080	PH	0.056	146204938	21.989	22.114
53	22.148	VH	0.048	115905055	22.114	22.206
54	22.290	VH	0.081	124222856	22.206	22.609
55	22.828	BH	0.055	1430792	22.709	22.917

57	25.847	PU	0.040	128744804	25.756	26.072
58	26.272	BU	0.055	1418050	26.217	26.341
59	26.495	PU	0.052	165515585	26.341	26.673
60	27.302	BB	0.056	190276112	27.100	27.614
61	29.132	BH	0.032	77768687	29.033	29.234
62	29.557	UH	0.062	2727653	29.508	29.650
63	30.322	BU	0.056	119670217	30.128	30.351
64	30.382	UU	0.042	121485934	30.351	30.411
65	30.453	UU	0.042	163137079	30.411	30.768
66	31.190	BU	0.042	108880816	31.100	31.362
67	31.435	PU	0.048	1144941	31.362	31.495
68	33.021	UU	0.040	81831573	32.932	33.187
69	33.535	PU	0.047	44808089	33.445	33.573
70	33.606	UU	0.052	47389440	33.573	33.915
71	34.498	UU	0.058	31001670	34.383	34.626
72	34.693	UU	0.071	32116504	34.626	34.941
73	38.968	UU	0.085	16048256	38.879	39.095
74	39.167	UU	0.112	20088685	39.095	39.501
75	40.195	PU	0.127	20191274	40.064	40.686

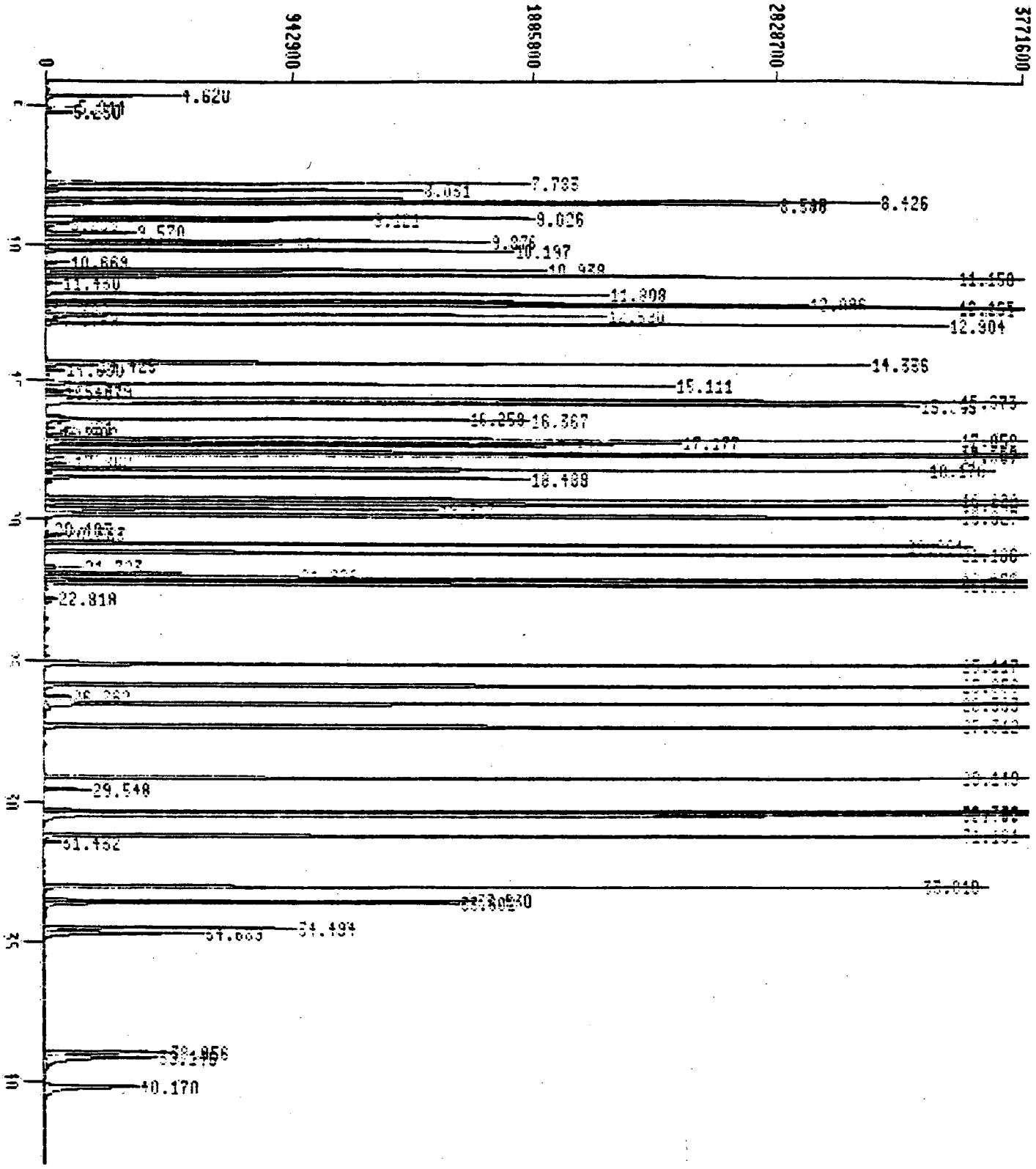
Data file: DATA:B008A94A.D
File type: GC / MS DATA FILE

Name Info: B/N 50 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMV
Misc Info:
Operator : T. SABATINO

Date : 29 Nov 87 11:44 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 94
Replicate num : 1

1: TIC of DATA:B008A94A.D



End of plot. Time = 4.13 to 43.00 minutes Chart speed = 0.51 cm/min

C of DATA:B008A94A.D
N 50 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMU

ak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.620	VV	0.070	12132739	4.561	4.889
2	5.044	VV	0.060	2236672	4.889	5.136
3	5.230	PH	0.045	2805870	5.136	5.315
4	7.783	VH	0.078	45082421	7.715	7.969
5	8.031	PH	0.055	34167320	7.969	8.210
6	8.426	BH	0.075	141673495	8.287	8.457
7	8.500	VH	0.039	60657731	8.457	8.521
8	8.543	VH	0.031	54069212	8.521	8.636
9	9.026	BH	0.047	53413157	8.936	9.064
10	9.121	PH	0.058	41487372	9.064	9.219
11	9.259	VH	0.073	4164279	9.219	9.443
12	9.570	VH	0.074	15933307	9.443	9.688
13	9.876	PH	0.046	47844723	9.802	9.913
14	9.972	VH	0.046	25121833	9.913	10.089
15	10.197	PH	0.060	41007152	10.126	10.314
16	10.669	PH	0.068	2245048	10.619	10.825
17	10.938	PH	0.061	67692921	10.825	11.074
18	11.158	VH	0.043	111121160	11.074	11.249
19	11.430	BB	0.044	1618854	11.361	11.517
20	11.808	BH	0.053	47835719	11.707	12.009
21	12.096	VH	0.052	66025934	12.009	12.121
22	12.165	VH	0.040	84019695	12.121	12.187
23	12.251	VH	0.058	222390653	12.187	12.361
24	12.392	PV	0.045	1004960	12.361	12.512
25	12.590	PV	0.044	57170752	12.512	12.748
26	12.763	VV	0.053	1360200	12.748	12.832
27	12.904	VV	0.038	73513647	12.832	13.059
28	14.336	BH	0.052	87138864	14.256	14.397
29	14.425	VH	0.047	5741406	14.397	14.559
30	14.630	PH	0.048	2293040	14.559	14.725
31	15.111	BV	0.071	66597447	14.915	15.273
32	15.319	PV	0.039	982513	15.273	15.362
33	15.407	VV	0.051	2149865	15.362	15.524
34	15.673	PH	0.047	190711354	15.524	15.723
35	15.805	VH	0.050	107003929	15.723	15.877
36	16.259	BH	0.035	1536387	16.133	16.296
37	16.367	PH	0.045	50969796	16.296	16.506
38	16.661	PB	0.031	590596	16.631	16.715
39	16.902	BH	0.034	1006906	16.804	16.927
40	17.059	PH	0.041	107932512	16.927	17.110
41	17.177	VH	0.058	87478984	17.110	17.257
42	17.318	PV	0.052	61802836	17.257	17.430
43	17.559	PV	0.053	116628127	17.430	17.609
44	17.667	VV	0.051	174781957	17.609	17.896
45	17.962	VV	0.053	3106854	17.896	18.037
46	18.170	VV	0.052	116876210	18.037	18.262
47	18.488	PV	0.053	61923594	18.360	18.603
48	19.229	BH	0.044	111806557	19.073	19.298
49	19.396	VH	0.059	184304857	19.298	19.521
50	19.617	VH	0.065	57464954	19.521	19.749
51	19.827	VH	0.065	197155971	19.749	19.956
52	20.403	BH	0.045	582100	20.347	20.447
53	20.563	PH	0.049	2438200	20.447	20.721
54	20.864	PH	0.048	96594646	20.721	21.006
55	21.186	PH	0.052	136580265	21.006	21.275

58	22.078	UU	0.068	153683555	21.984	22.119
59	22.150	UU	0.049	147466922	22.119	22.207
60	22.299	UU	0.048	162719996	22.207	22.459
61	22.818	BH	0.061	1867907	22.750	23.042
62	25.117	BH	0.052	241324191	24.985	25.399
63	25.856	UU	0.048	179744217	25.746	26.092
64	26.262	BU	0.037	2227911	26.214	26.348
65	26.503	PU	0.063	236414284	26.348	26.663
66	27.312	PB	0.056	222009151	27.153	27.634
67	29.140	BB	0.050	115919674	29.009	29.333
68	29.548	BB	0.055	4591429	29.456	29.690
69	30.330	BU	0.051	154428620	30.171	30.353
70	30.382	UU	0.052	149866045	30.353	30.420
71	30.463	UU	0.049	191117243	30.420	30.775
72	31.191	BU	0.051	157983111	31.087	31.379
73	31.432	UU	0.060	2026716	31.379	31.523
74	33.018	BU	0.079	87846642	32.909	33.199
75	33.530	BU	0.049	44726327	33.434	33.567
76	33.602	UU	0.049	47131087	33.567	33.919
77	34.494	UU	0.063	33720459	34.398	34.618
78	34.689	UU	0.071	28471321	34.618	34.959
79	38.956	PU	0.080	23863996	38.867	39.066
80	39.146	UU	0.103	29428169	39.066	39.468
81	40.170	PU	0.116	28716420	40.076	40.615

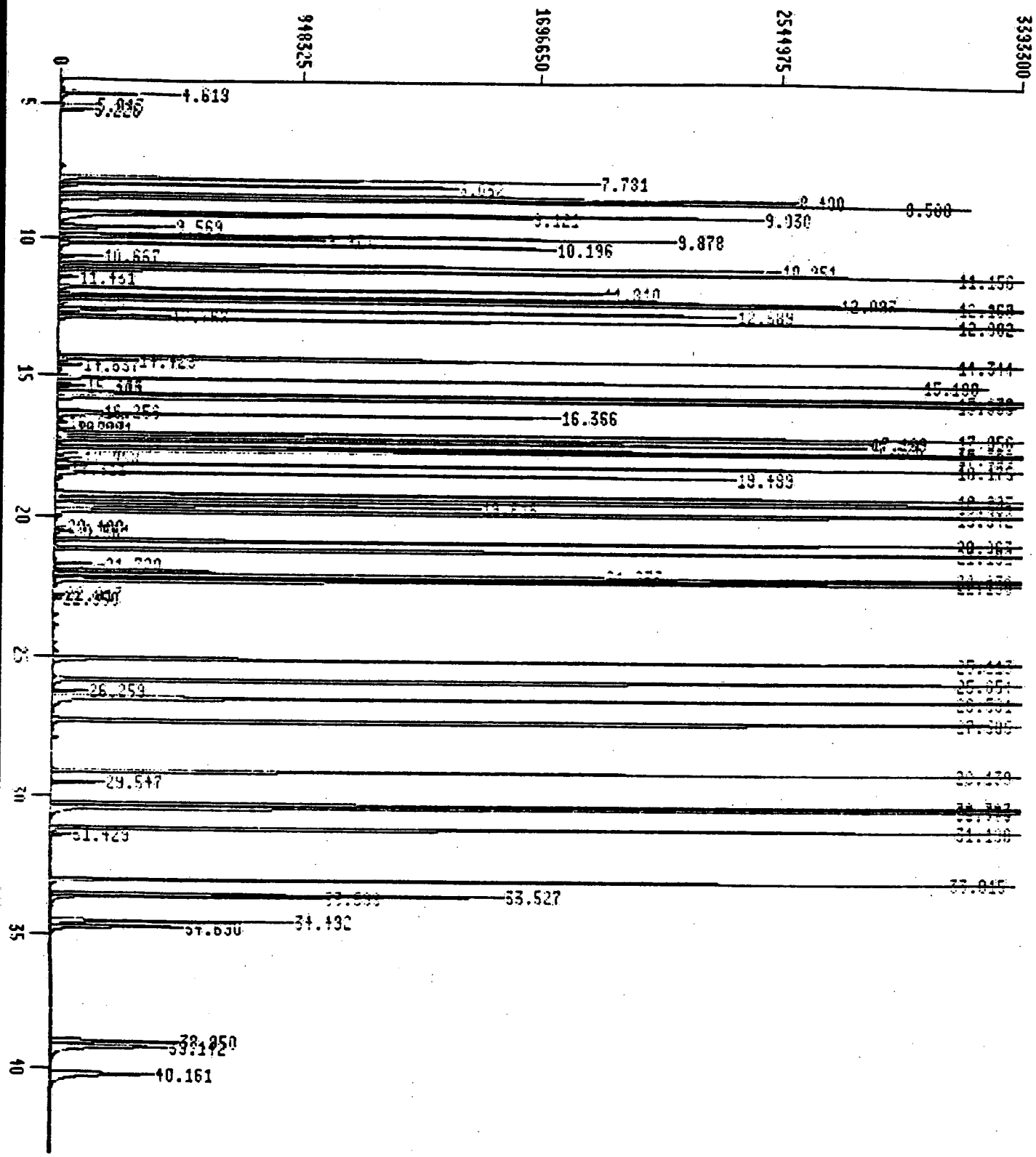
Data file: DATA:B008A95A.D
File type: GC / MS DATA FILE

Name Info: B/N 60 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMU
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 12:36 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 95
Replicate num : 1

1: TIC of DATA:B008A95A.D



End of plot. Time = 4.13 to 43.02 minutes Chart speed = 0.51 cm/min

TIC of DATA:B008A95A.D
B/N 60 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMV

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.619	PH	0.079	11428226	4.560	4.890
2	5.043	BH	0.031	2057485	4.945	5.096
3	5.226	PH	0.042	2629870	5.163	5.297
4	7.781	BH	0.048	52272653	7.683	7.965
5	8.032	VH	0.048	39387133	7.965	8.237
6	8.400	PV	0.090	140569013	8.304	8.456
7	8.500	VB	0.092	118680427	8.456	8.745
8	9.030	BH	0.045	61343474	8.924	9.066
9	9.121	VH	0.084	52110644	9.066	9.470
10	9.569	VH	0.075	18133655	9.470	9.706
11	9.878	BH	0.046	55486433	9.784	9.912
12	9.971	VH	0.049	26814056	9.912	10.120
13	10.196	VH	0.068	45500648	10.120	10.488
14	10.667	BB	0.057	3393871	10.611	10.801
15	10.951	BH	0.059	79056085	10.824	11.075
16	11.156	PV	0.065	106585477	11.075	11.231
17	11.431	BB	0.045	1803249	11.371	11.517
18	11.810	BH	0.048	56857298	11.706	12.014
19	12.093	PH	0.056	74152213	12.014	12.121
20	12.163	VH	0.048	77878698	12.121	12.185
21	12.250	VH	0.053	225546017	12.185	12.348
22	12.390	VH	0.049	996282	12.348	12.478
23	12.589	BH	0.038	62305152	12.511	12.746
24	12.768	VH	0.050	1533001	12.746	12.832
25	12.902	VH	0.034	84145658	12.832	13.063
26	14.344	PH	0.050	104462093	14.249	14.393
27	14.423	VH	0.059	7590114	14.393	14.562
28	14.637	PH	0.048	2345077	14.562	14.713
29	15.108	VH	0.043	74921799	14.978	15.204
30	15.316	BH	0.043	1113254	15.260	15.362
31	15.404	VH	0.056	2003462	15.362	15.473
32	15.670	BH	0.045	171829948	15.528	15.721
33	15.805	VH	0.059	118083052	15.721	15.975
34	16.256	BH	0.037	1639152	16.199	16.293
35	16.366	VH	0.058	59140074	16.293	16.612
36	16.659	PH	0.043	689251	16.612	16.702
37	16.901	BH	0.029	1020264	16.847	16.943
38	17.056	VH	0.043	113285714	16.943	17.109
39	17.189	PH	0.058	99611579	17.109	17.258
40	17.326	VH	0.039	68852043	17.258	17.428
41	17.556	PH	0.053	107369778	17.428	17.604
42	17.665	VH	0.052	180766900	17.604	17.878
43	17.958	VH	0.060	2544218	17.878	18.040
44	18.175	VH	0.048	130920165	18.040	18.262
45	18.311	VH	0.043	1157714	18.262	18.359
46	18.489	VH	0.047	66815568	18.359	18.601
47	19.227	BH	0.044	116941478	19.071	19.311
48	19.394	VH	0.064	206654487	19.311	19.519
49	19.616	VH	0.073	62699661	19.519	19.746
50	19.842	VH	0.063	219227595	19.746	19.954
51	20.400	BH	0.053	828656	20.300	20.468
52	20.561	PH	0.050	1895773	20.468	20.691
53	20.863	PH	0.046	105790376	20.691	20.960
54	21.192	BH	0.054	152916258	21.038	21.272
55	21.720	BH	0.044	4350290	21.641	21.809
56	21.933	PV	0.046	14891047	21.809	21.985

58	22.162	VV	0.050	179460484	22.105	22.207
59	22.298	VV	0.046	168720409	22.207	22.457
60	22.817	BV	0.043	997512	22.714	22.902
61	22.950	PB	0.074	743667	22.902	23.072
62	25.113	BH	0.054	225186305	24.938	25.374
63	25.854	BV	0.052	192147633	25.743	26.100
64	26.259	VV	0.036	2567116	26.207	26.335
65	26.501	PV	0.068	248190080	26.335	26.916
66	27.305	BH	0.063	202258994	27.173	27.585
67	29.139	BH	0.049	122450911	29.028	29.375
68	29.547	BH	0.049	4812187	29.453	29.665
69	30.327	BV	0.052	152282528	30.213	30.351
70	30.371	VV	0.054	129229521	30.351	30.416
71	30.460	VB	0.050	187779753	30.416	30.939
72	31.190	BH	0.050	169445988	31.084	31.371
73	31.429	VH	0.048	2006465	31.371	31.503
74	33.015	PV	0.080	85013279	32.934	33.383
75	33.527	PV	0.047	41119900	33.448	33.562
76	33.598	VV	0.049	44286808	33.562	33.934
77	34.492	BV	0.062	31333388	34.415	34.617
78	34.690	VV	0.130	22191974	34.617	34.962
79	38.950	PV	0.078	23221444	38.799	39.064
80	39.142	VV	0.106	28704510	39.064	39.555
81	40.161	BV	0.106	27457199	40.080	40.608

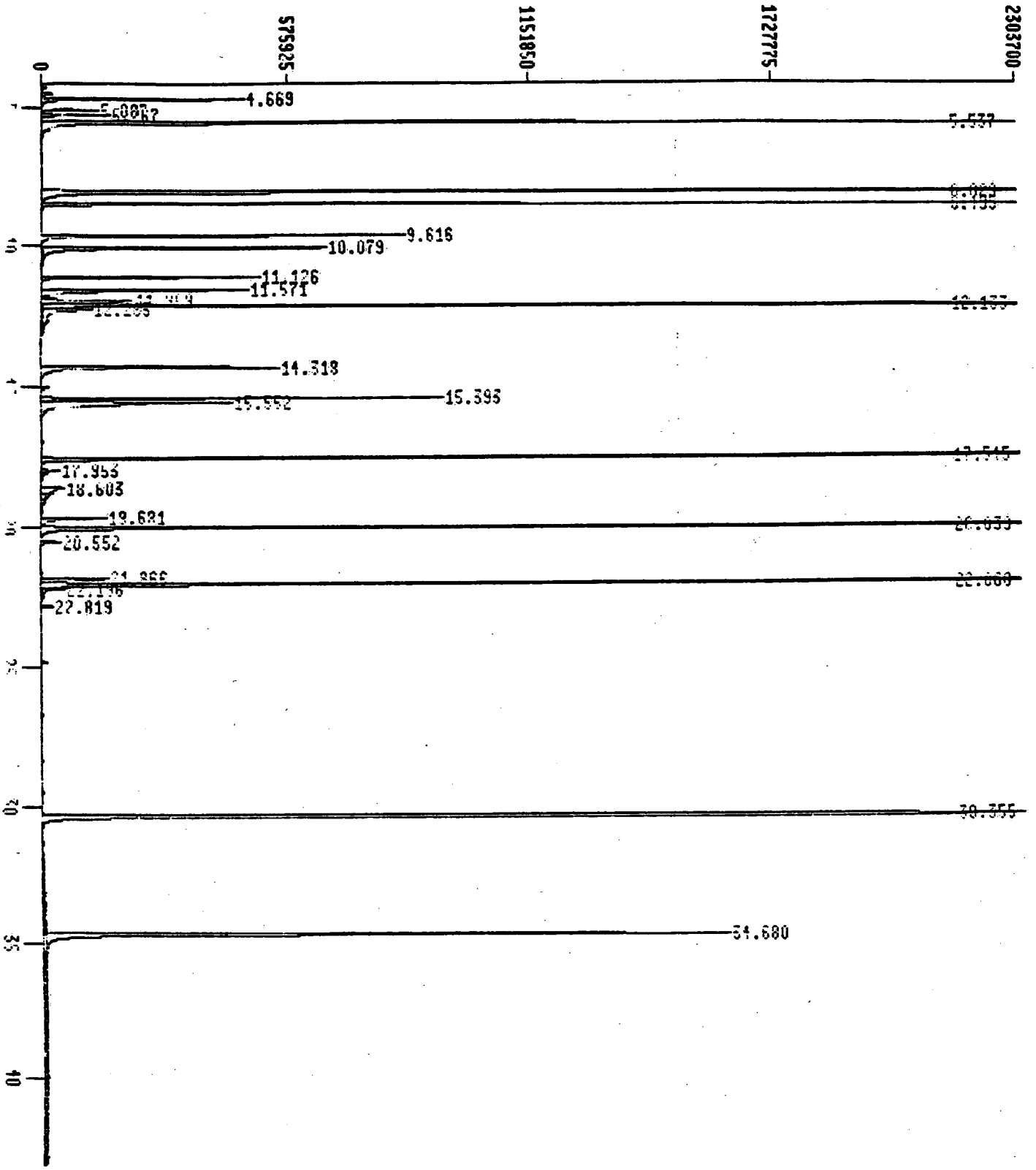
Data file: DATA:B008A96A.D
File type: GC / MS DATA FILE

Name Info: PHENOL STANDARD 20 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 1:27 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 96
Replicate num : 1

1: TIC of DATA:B008A96A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

IC of DATA:B008A96A.D
HENOL STANDARD 20 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.669	PU	0.048	14892758	4.615	4.955
2	5.087	PB	0.052	2753833	4.955	5.156
3	5.267	BH	0.045	3294335	5.212	5.357
4	5.537	BH	0.043	72710944	5.457	5.936
5	8.029	BH	0.069	101806311	7.911	8.419
6	8.495	VH	0.044	61507519	8.419	8.725
7	9.616	BH	0.051	25279679	9.539	9.907
8	10.079	BV	0.059	24306163	9.985	10.385
9	11.126	BH	0.038	10779067	11.034	11.303
10	11.571	BV	0.066	21177695	11.502	11.772
11	11.959	VV	0.103	14072141	11.879	12.062
12	12.133	VV	0.053	82477453	12.062	12.223
13	12.285	VV	0.146	10097957	12.223	12.834
14	14.318	BH	0.063	21679041	14.246	14.681
15	15.393	BH	0.047	23945611	15.295	15.504
16	15.552	VH	0.095	27034444	15.504	16.042
17	17.545	BH	0.049	104241447	17.414	17.698
18	17.953	BH	0.050	1314100	17.882	18.004
19	18.603	BH	0.119	4701038	18.507	18.779
20	19.681	PU	0.068	7192055	19.527	19.923
21	20.039	VB	0.052	131431097	19.923	20.369
22	20.552	BH	0.051	1536585	20.492	20.704
23	21.866	BV	0.075	8020628	21.775	21.966
24	22.060	VV	0.048	128109543	21.966	22.156
25	22.196	VV	0.077	3072138	22.156	22.444
26	22.819	BH	0.047	723711	22.745	22.890
27	30.355	BH	0.056	156833335	30.229	30.854
28	34.680	PU	0.067	69248555	34.587	35.092

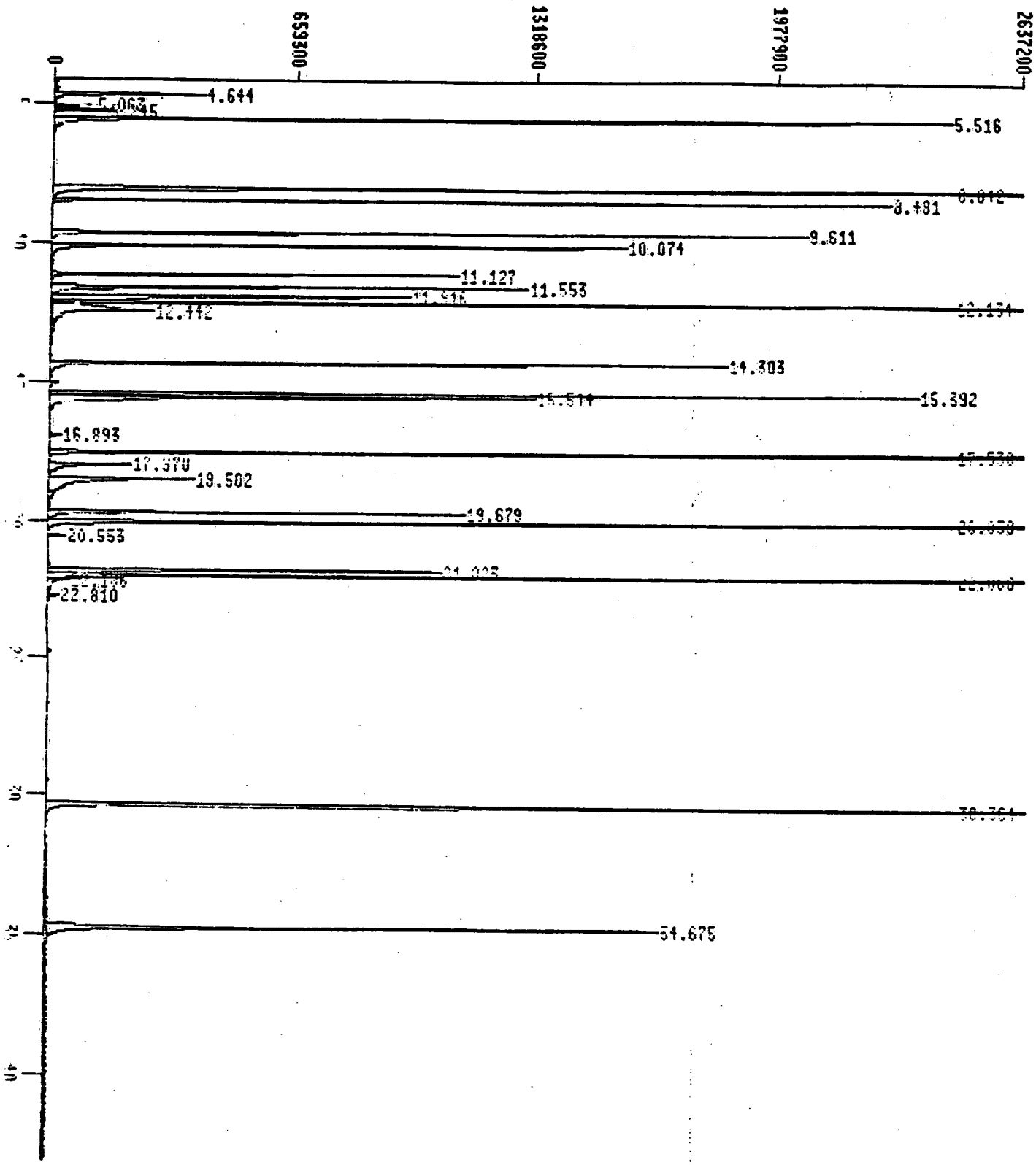
Data file: DATA:B008A97A.D
File type: GC / MS DATA FILE

Name Info: PHENOL STANDARD 40 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 2:18 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 97
Replicate num : 1

1: TIC of DATA:B008A97A.D



End of plot. Time = 4.13 to 43.02 minutes Chart speed = 0.51 cm/min

IC of DATA:B008A97A.D
HENOL STANDARD 40 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.644	PH	0.108	14378412	4.582	4.933
2	5.063	PH	0.055	2598653	4.933	5.156
3	5.245	BH	0.047	3135489	5.190	5.335
4	5.516	BH	0.046	68515367	5.435	5.741
5	8.042	BH	0.061	128942811	7.912	8.387
6	8.481	VH	0.044	56543371	8.387	8.749
7	9.611	BH	0.040	45063440	9.519	9.931
8	10.074	BB	0.052	50401746	9.987	10.556
9	11.127	BB	0.036	22489800	11.036	11.359
10	11.553	BV	0.056	43455155	11.471	11.856
11	11.916	VV	0.082	36442142	11.856	12.064
12	12.134	VV	0.044	79654613	12.064	12.190
13	12.442	VV	0.153	31214710	12.190	12.990
14	14.303	BH	0.079	45730274	14.227	14.729
15	15.392	BH	0.041	51242338	15.275	15.469
16	15.514	VH	0.070	63408692	15.469	15.889
17	16.893	BH	0.057	828145	16.793	16.982
18	17.538	BH	0.081	96800401	17.406	17.719
19	17.970	BH	0.085	13241098	17.864	18.388
20	18.502	VH	0.136	24659791	18.439	18.961
21	19.679	BH	0.060	27871275	19.604	19.883
22	20.039	VH	0.037	139085883	19.931	20.352
23	20.553	BH	0.055	1112540	20.497	20.619
24	21.823	BH	0.070	43903208	21.735	21.976
25	22.066	VH	0.049	148119499	21.976	22.158
26	22.186	VH	0.101	4935716	22.158	22.519
27	22.810	VH	0.052	859476	22.739	22.912
28	30.364	BH	0.059	183384703	30.248	30.684
29	34.675	BV	0.068	69618653	34.543	35.056

SECTION 3.0
TOTAL ION CHROMATOGRAMS FOR SAMPLES, STANDARDS, DUPLICATES AND BLANKS, SEMI-VOLATILE ORGANIC COMPOUND ANALYSIS

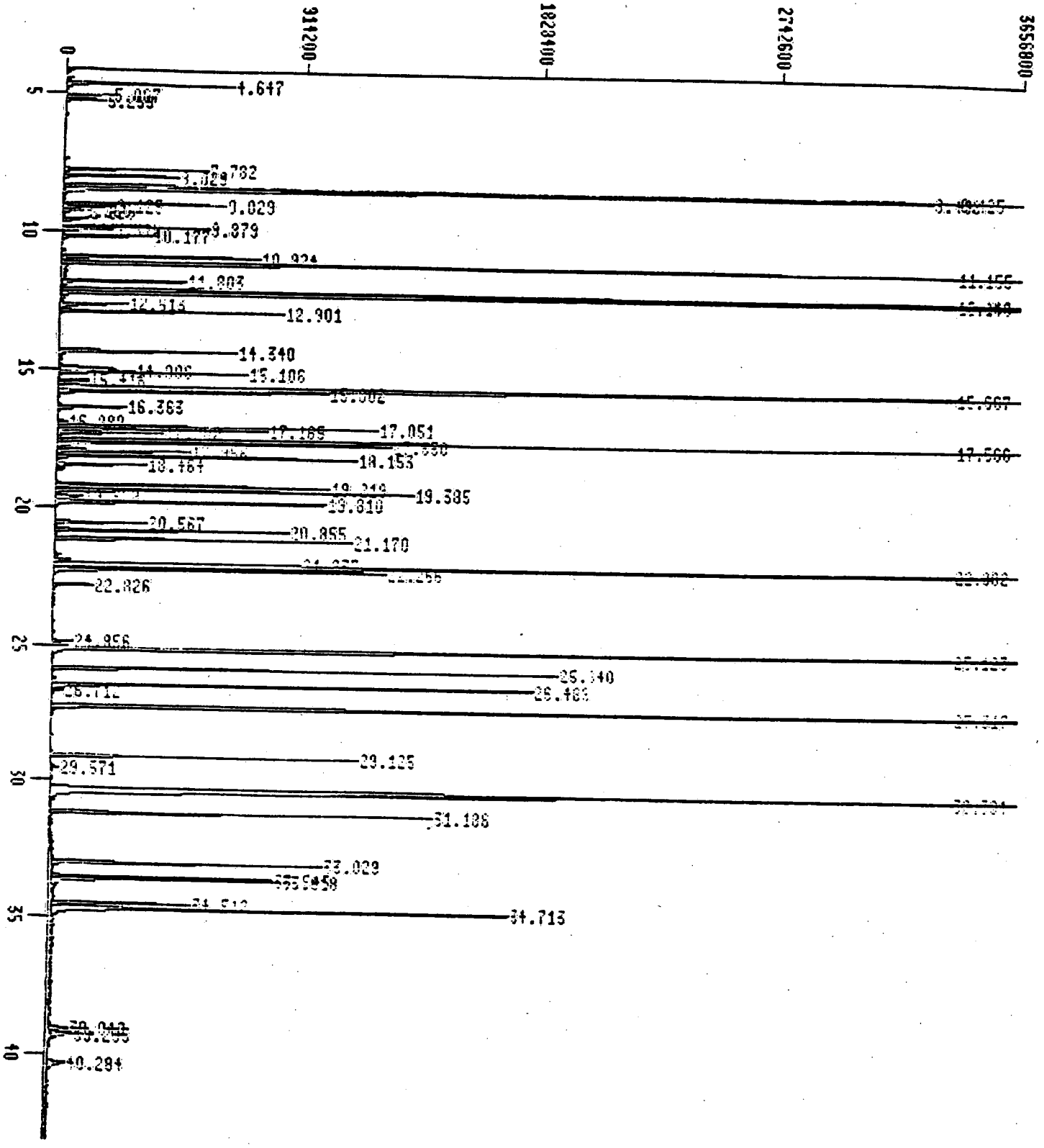
Data file: DATA:B008A91A.D
File type: GC / MS DATA FILE

Name Info: B/N 10 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMU
Misc Info:
Operator : T. SABATINO

Date : 29 Nov 87 9:10 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 91
Replicate num : 1

1: TIC of DATA:B008A91A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

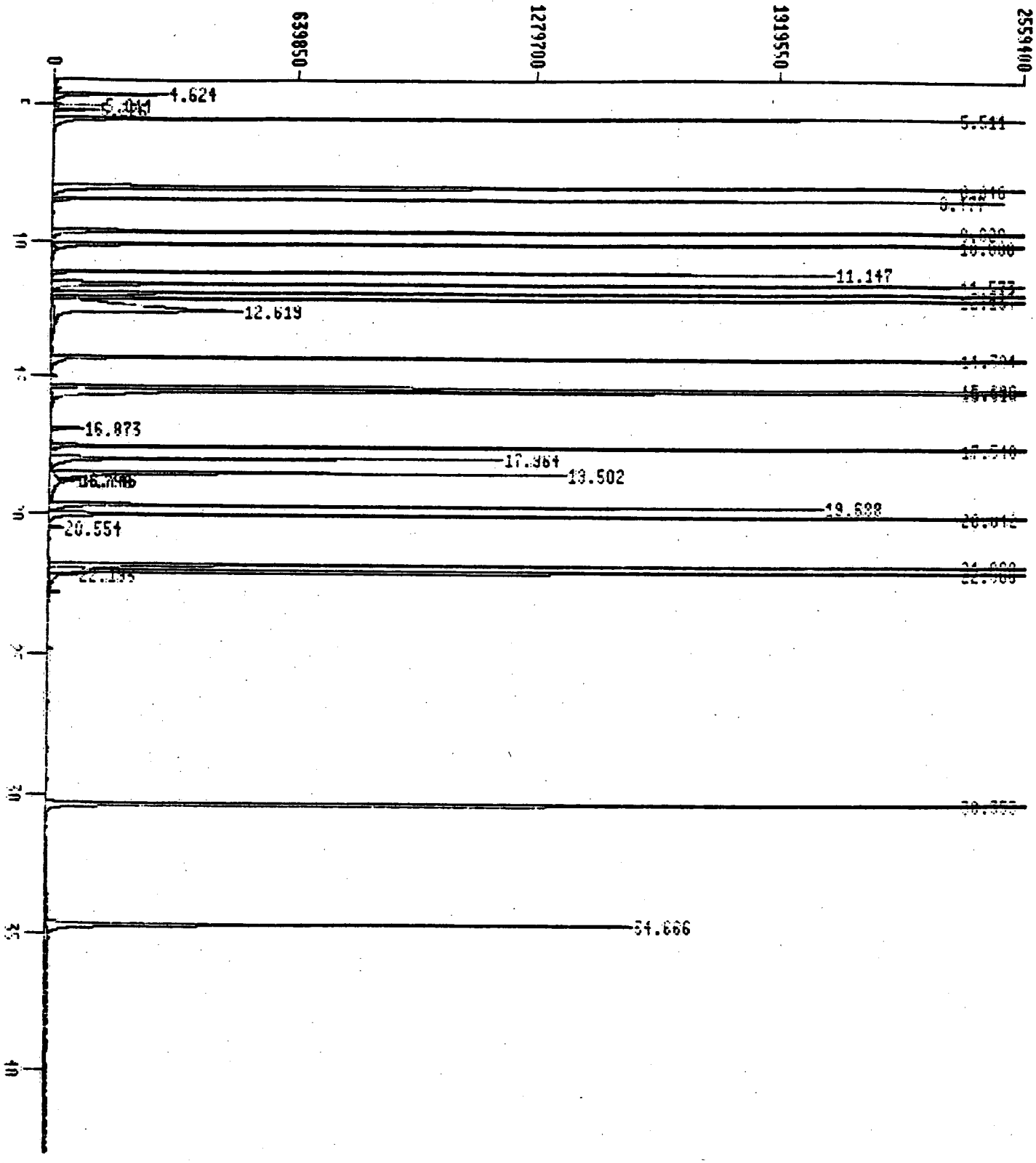
Data file: DATA:B008A98A.D
File type: GC / MS DATA FILE

Name Info: PHENOL STANDARD 80 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 3:09 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 98
Replicate num : 1

1: TIC of DATA:B008A98A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

IC of DATA:B008A98A.D
HENOL STANDARD 80 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.624	PU	0.067	12426347	4.572	4.934
2	5.044	PH	0.050	2293389	4.934	5.112
3	5.226	BH	0.041	2758789	5.168	5.313
4	5.511	BH	0.104	69457123	5.413	6.005
5	8.046	BH	0.055	177519103	7.891	8.293
6	8.477	VH	0.070	54282962	8.376	8.639
7	9.629	BH	0.043	96639799	9.509	9.855
8	10.088	BV	0.055	102301116	10.022	10.303
9	11.147	BV	0.042	52714947	11.016	11.395
10	11.573	BV	0.046	90271034	11.451	11.852
11	11.911	VV	0.048	84292191	11.852	12.064
12	12.134	VV	0.043	82103685	12.064	12.192
13	12.619	VV	0.188	72657954	12.192	13.016
14	14.304	BV	0.073	88595190	14.207	14.745
15	15.396	BV	0.042	95685167	15.334	15.452
16	15.510	VV	0.074	124853650	15.452	15.959
17	16.873	BH	0.063	2431930	16.819	16.989
18	17.540	BH	0.059	104037097	17.443	17.678
19	17.964	BV	0.097	42640128	17.868	18.372
20	18.502	PV	0.103	48304182	18.372	18.729
21	18.746	VV	0.037	792958	18.729	18.768
22	18.796	VV	0.064	1995758	18.768	18.888
23	19.688	BV	0.053	62965280	19.597	19.909
24	20.042	VV	0.047	141352429	19.952	20.367
25	20.554	VB	0.046	1025157	20.473	20.613
26	21.809	BV	0.050	111246576	21.673	21.981
27	22.060	VV	0.055	144412073	21.981	22.161
28	22.193	VV	0.092	4893017	22.161	22.601
29	30.353	BH	0.053	170347681	30.255	30.604
30	34.666	VV	0.064	65948802	34.578	35.076

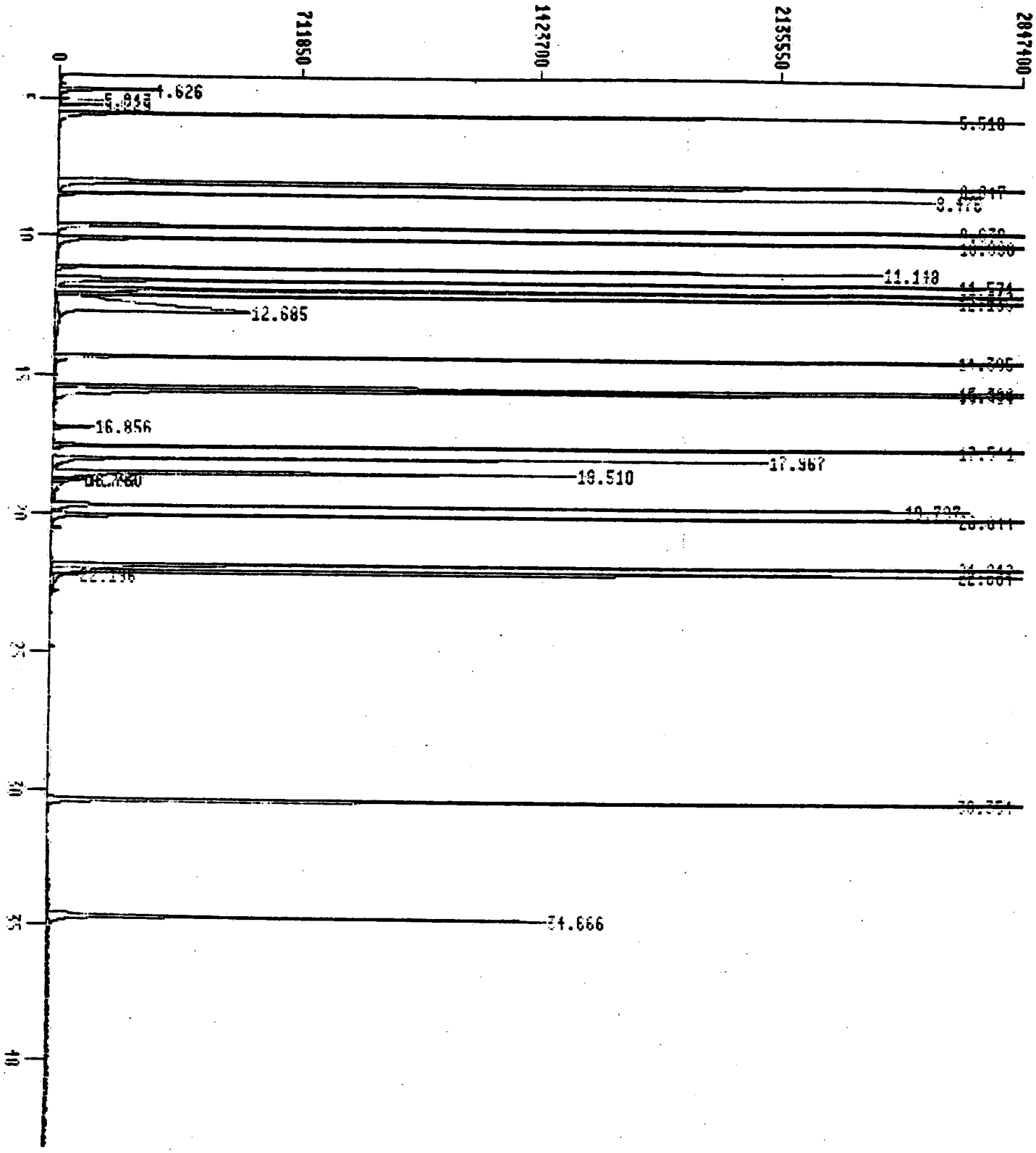
Data file: DATA:B008A99A.D
File type: GC / MS DATA FILE

Name Info: PHENOL STANDARD 100 PPMØ + 40 PPM ISS, 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 4:01 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 99
Replicate num : 1

1: TIC of DATA:B008A99A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

:C of DATA:B008A99A.D
:ENOL STANDARD 100 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL

ak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.626	PH	0.063	12603504	4.582	4.987
2	5.043	VH	0.045	2316545	4.987	5.134
3	5.225	PH	0.038	2767480	5.134	5.313
4	5.510	BH	0.066	71139148	5.447	5.982
5	8.047	BV	0.058	207399190	7.913	8.337
6	8.476	VB	0.039	53565815	8.421	8.616
7	9.630	BH	0.043	113315842	9.543	9.878
8	10.098	PH	0.051	125631538	10.028	10.413
9	11.148	BH	0.042	61934882	11.049	11.340
10	11.574	BH	0.049	103321874	11.474	11.859
11	11.912	PV	0.045	103560200	11.859	12.064
12	12.135	VV	0.043	81478864	12.064	12.193
13	12.685	VV	0.209	93799469	12.193	12.994
14	14.305	BV	0.080	103124947	14.208	14.665
15	15.398	BV	0.045	118253285	15.302	15.453
16	15.511	VV	0.072	152451724	15.453	15.938
17	16.856	BH	0.049	3702255	16.797	17.009
18	17.541	BH	0.062	104560325	17.444	17.701
19	17.967	BV	0.088	60822437	17.891	18.352
20	18.510	VV	0.071	68516096	18.352	18.708
21	18.730	VV	0.055	2418231	18.708	18.768
22	18.797	VV	0.080	4533559	18.768	18.889
23	19.707	VV	0.056	87584427	19.618	19.871
24	20.044	VV	0.049	150156023	19.953	20.373
25	21.812	BV	0.057	150402557	21.697	21.982
26	22.064	VV	0.055	143150184	21.982	22.158
27	22.196	VV	0.096	5000703	22.158	22.500
28	30.354	BV	0.055	174162020	30.223	30.670
29	34.666	BV	0.066	61384072	34.531	35.025

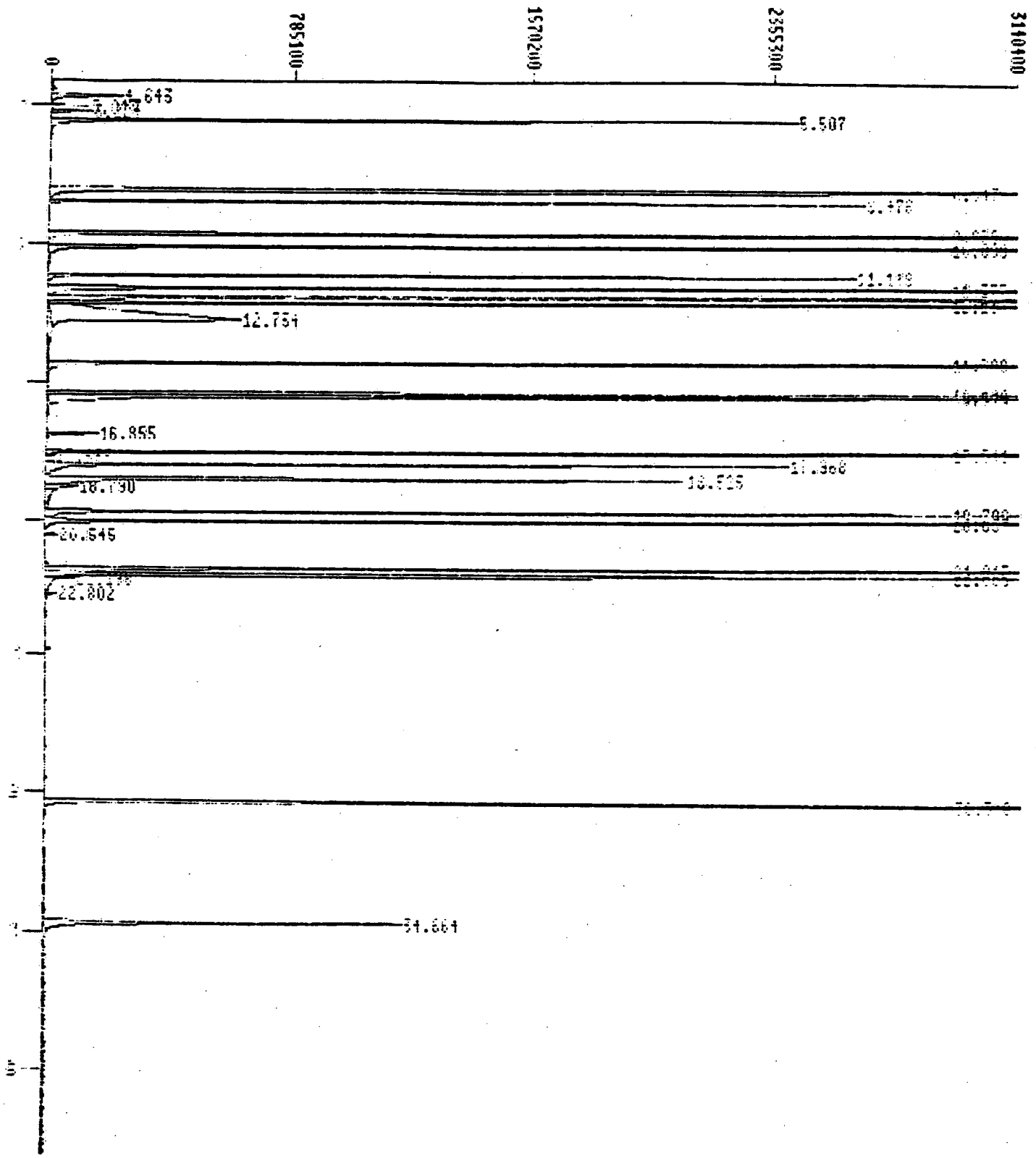
Data file: DATA:B009A014.D
File type: GC / MS DATA FILE

Name Info: PHENOL STANDARD 125 PPM - 40 PPM ISS 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 4:55 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 1
Replicate num : 1

1: TIC of DATA:B009A01A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009A01A.D
PHENOL STANDARD 125 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.643	PH	0.083	12355883	4.582	4.913
2	5.043	VH	0.052	2389266	4.982	5.090
3	5.224	PH	0.059	2930524	5.162	5.291
4	5.507	BH	0.050	70657997	5.413	5.960
5	8.047	BH	0.059	233480158	7.913	8.394
6	8.476	VH	0.039	54411603	8.394	8.594
7	9.630	BH	0.044	128038062	9.521	9.882
8	10.099	BH	0.056	139571427	10.012	10.420
9	11.148	BV	0.043	69543421	11.061	11.354
10	11.577	BH	0.060	124966759	11.485	11.859
11	11.912	PV	0.046	119810593	11.859	12.063
12	12.134	VV	0.045	91760846	12.063	12.192
13	12.734	VV	0.235	113641473	12.192	13.061
14	14.308	VV	0.049	126074359	14.224	14.666
15	15.400	PV	0.047	133717748	15.320	15.454
16	15.513	VV	0.069	167375059	15.454	15.875
17	16.855	BB	0.043	4198064	16.775	16.987
18	17.541	BH	0.045	102809191	17.445	17.610
19	17.635	VH	0.034	671679	17.610	17.702
20	17.968	BH	0.069	73481137	17.824	18.369
21	18.525	VH	0.067	83097163	18.412	18.747
22	18.790	VH	0.091	6658050	18.747	18.911
23	19.709	VH	0.059	103857532	19.580	19.913
24	20.037	VH	0.054	135967692	19.913	20.436
25	20.545	VH	0.051	891770	20.490	20.592
26	21.815	BV	0.055	176928813	21.719	21.982
27	22.065	VV	0.054	140368032	21.982	22.157
28	22.198	VV	0.092	6017901	22.157	22.423
29	22.802	VV	0.066	1231874	22.754	23.003
30	30.340	BV	0.061	154096860	30.246	30.693
31	34.664	PV	0.069	53634822	34.572	34.981

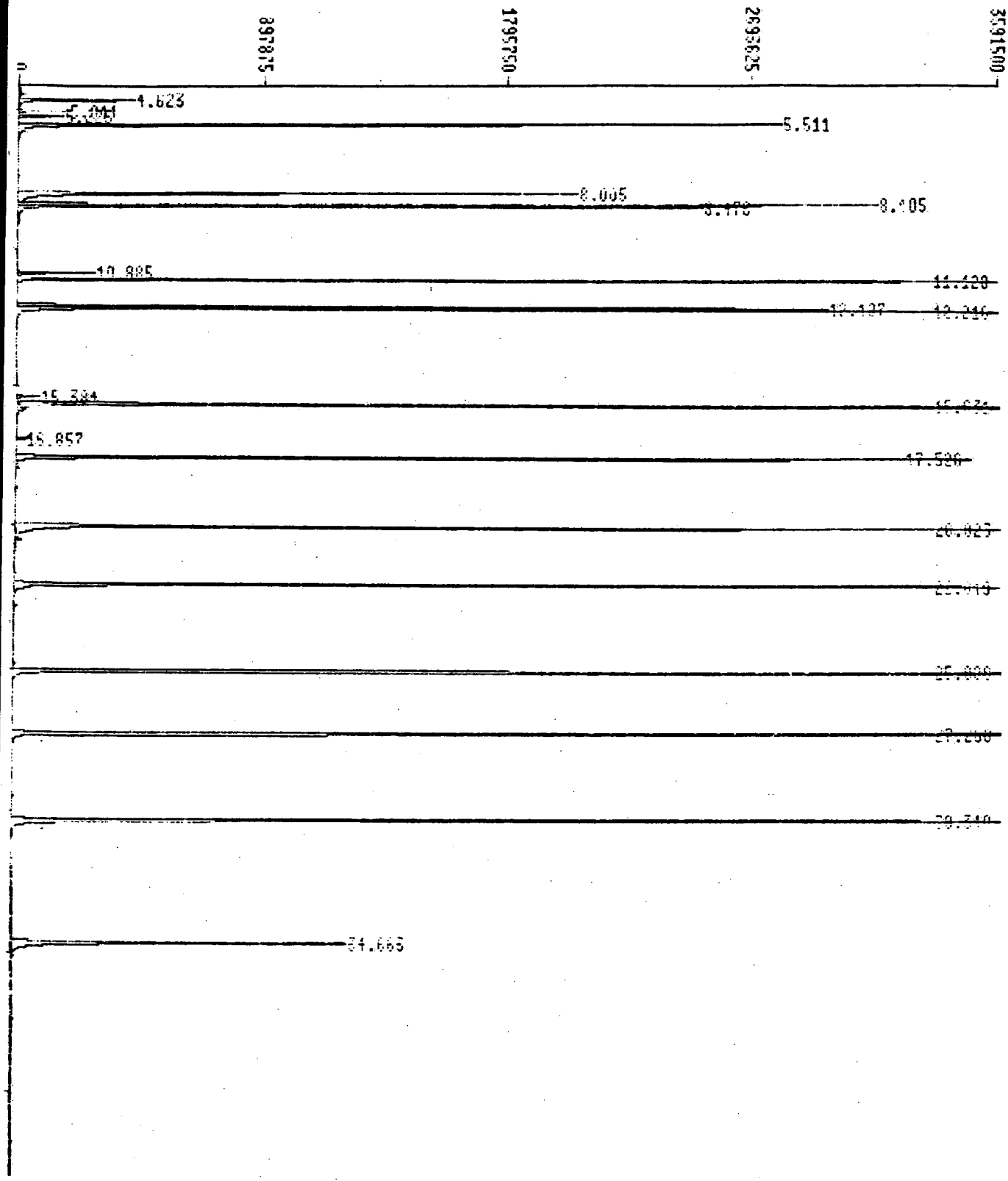
Data file: DATA:B009A02A.D
File type: GC / MS DATA FILE

Name Info: C.C.E. SOIL 101.1 DF=0.1 + 40 PPM ISS. 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 5:46 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 2
Replicate num : 1

TIC of DATA:B009A02A.D



of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

IC of DATA:B009A02A.D
.C.E. SOIL 101.1 DF=0.1 + 40 PPM ISS, 100 PPM SUR 2 UL

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.623	VV	0.045	12413917	4.573	4.993
2	5.044	VV	0.043	3280715	4.993	5.134
3	5.225	VB	0.041	3954676	5.173	5.312
4	5.511	BH	0.076	63174897	5.435	5.914
5	8.005	BH	0.053	58552176	7.911	8.329
6	8.405	VH	0.046	79726917	8.329	8.437
7	8.476	VH	0.063	56102675	8.437	8.772
8	10.885	BH	0.067	7035993	10.833	11.035
9	11.128	VH	0.043	103218785	11.035	11.290
10	12.127	BH	0.044	64255291	12.015	12.160
11	12.216	VH	0.051	136768249	12.160	12.398
12	15.384	BH	0.033	1596076	15.294	15.461
13	15.631	BV	0.051	151611689	15.517	15.816
14	16.857	BB	0.032	801527	16.811	16.911
15	17.526	BH	0.045	91360395	17.413	17.826
16	20.023	BV	0.048	114171087	19.945	20.424
17	22.049	BH	0.085	128318157	21.952	22.432
18	25.088	BH	0.053	221061280	24.930	25.477
19	27.288	BH	0.061	226629542	27.105	27.508
20	30.348	BV	0.058	173707482	30.205	30.785
21	34.663	BV	0.110	55207485	34.577	35.115

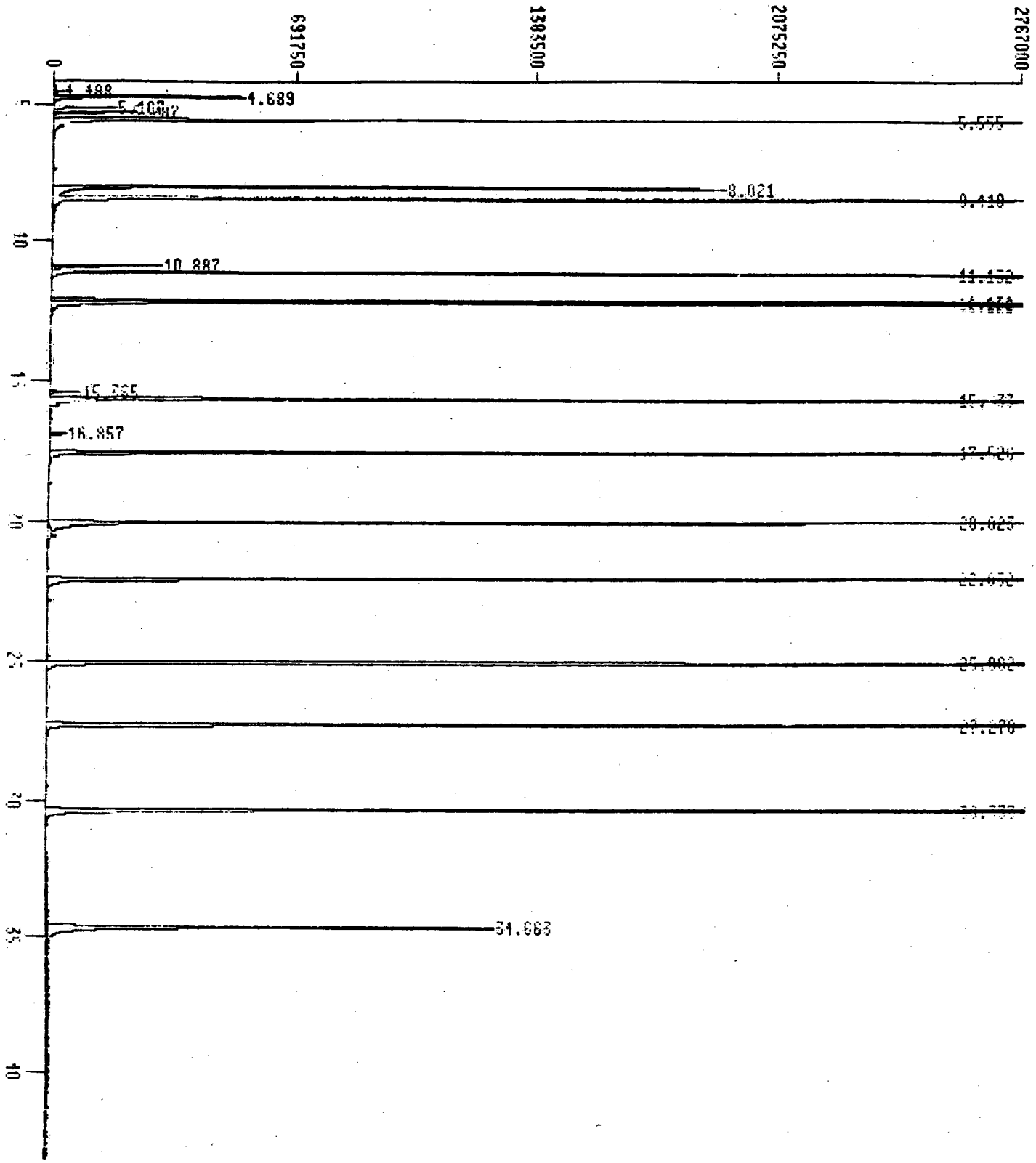
Data file: DATA:B009A03A.D
File type: GC / MS DATA FILE

Name Info: C.C.E. SOIL 102.1 DF=0.1 + 40 PPM ISS, 100 PPM SUR 2 UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 6:37 am
Instrment: MS_5970
Inlet : GC

Sequence index : 1
Als bottle num : 3
Replicate num : 1

1: TIC of DATA:B009A03A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

IC of DATA:B009A03A.D
.C.E. SOIL 102.1 DF=0.1 + 40 PPM ISS, 100 PPM SUR 2 UL

eak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.488	VV	0.035	592405	4.420	4.536
2	4.689	VV	0.065	14778659	4.635	5.000
3	5.107	PH	0.069	4231511	5.050	5.200
4	5.287	PH	0.065	5169164	5.200	5.468
5	5.555	BV	0.069	76609583	5.468	6.004
6	8.021	BH	0.054	64343274	7.899	8.351
7	8.410	PV	0.081	140968460	8.351	8.870
8	10.887	BV	0.048	8749734	10.833	11.051
9	11.132	VB	0.050	129047706	11.051	11.334
10	12.132	BV	0.043	70237776	11.981	12.162
11	12.222	VV	0.067	151850651	12.162	12.561
12	15.385	BB	0.033	1635226	15.260	15.439
13	15.633	BB	0.054	165485484	15.517	16.108
14	16.857	BB	0.031	786261	16.733	16.911
15	17.526	BH	0.049	89784598	17.413	17.815
16	20.023	BV	0.049	94591834	19.956	20.383
17	22.032	BH	0.054	110168136	21.952	22.465
18	25.082	BB	0.057	195374317	24.930	25.432
19	27.278	BV	0.118	170085136	27.105	27.640
20	30.333	BB	0.063	123944490	30.172	30.841
21	34.663	BV	0.120	61876424	34.544	35.194

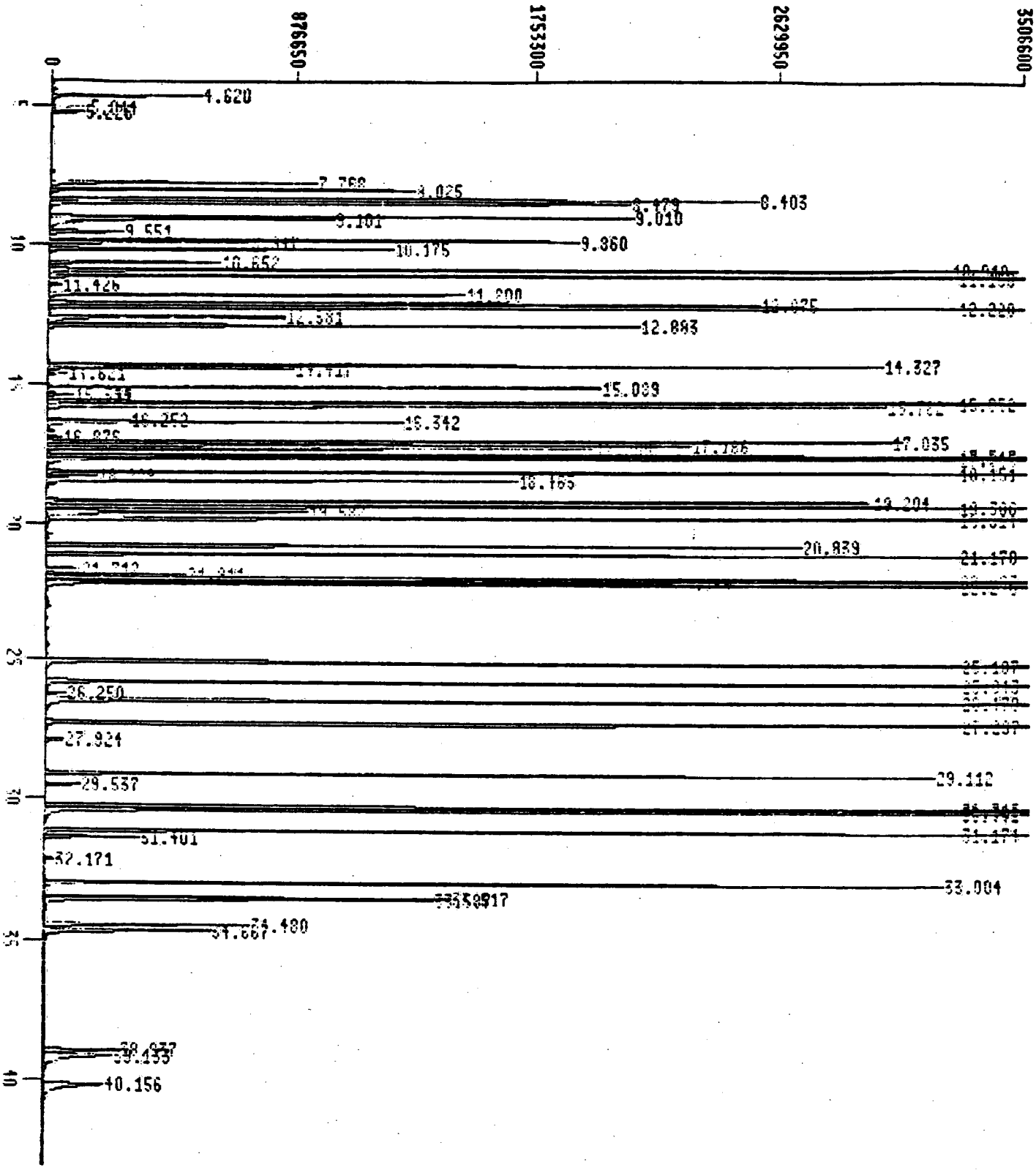
Data file: DATA:B009C05A.D
File type: GC / MS DATA FILE

Name Info: B/N 40 PPMQ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMV
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 8:17 am
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 5
Replicate num : 1

1: TIC of DATA:B009C05A.D



End of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

:C of DATA:B009C05A.D
'N 40 PPM@ + 40 PPM ISS, 100 PPM SUR 2 UL 1600 EMV

ak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.620	PB	0.081	12342217	4.561	4.912
2	5.044	BB	0.050	2236876	4.945	5.113
3	5.226	BH	0.042	2815686	5.169	5.292
4	7.768	BH	0.048	28046042	7.705	7.962
5	8.025	VH	0.089	28000024	7.962	8.185
6	8.403	BH	0.066	99033837	8.263	8.435
7	8.479	VH	0.068	100316858	8.435	8.615
8	9.010	BH	0.035	41775191	8.878	9.057
9	9.101	VH	0.081	34010882	9.057	9.436
10	9.551	VH	0.069	12780180	9.481	9.727
11	9.860	BH	0.045	38770613	9.783	9.905
12	9.947	VH	0.042	17847073	9.905	10.084
13	10.175	PH	0.042	31141637	10.084	10.420
14	10.652	BH	0.049	18166225	10.520	10.827
15	10.910	PH	0.078	104654901	10.827	11.064
16	11.150	VH	0.051	113963305	11.064	11.249
17	11.426	VH	0.056	1073912	11.358	11.537
18	11.800	BH	0.064	38740296	11.704	11.920
19	12.075	VH	0.120	137976771	11.993	12.180
20	12.228	VH	0.049	180709050	12.180	12.324
21	12.581	BH	0.059	32994025	12.497	12.827
22	12.883	PH	0.045	57500373	12.827	13.045
23	14.327	BH	0.039	68256064	14.229	14.373
24	14.417	VH	0.043	22816898	14.373	14.569
25	14.621	VH	0.054	1471076	14.569	14.687
26	15.089	PH	0.055	43121486	14.983	15.161
27	15.314	BH	0.039	679876	15.257	15.352
28	15.399	VH	0.050	2071541	15.352	15.447
29	15.652	BH	0.053	189874153	15.525	15.711
30	15.782	VH	0.043	78157449	15.711	15.972
31	16.252	BH	0.031	914603	16.195	16.286
32	16.342	VH	0.048	36977485	16.286	16.564
33	16.876	BH	0.029	867404	16.821	16.927
34	17.035	PH	0.045	82086725	16.927	17.096
35	17.166	VH	0.049	65848371	17.096	17.234
36	17.299	VH	0.033	45468937	17.234	17.424
37	17.547	BH	0.043	105141834	17.436	17.593
38	17.645	VH	0.052	125107930	17.593	17.909
39	18.151	VH	0.068	83830119	17.999	18.239
40	18.289	VH	0.039	3866346	18.239	18.354
41	18.463	PH	0.046	45020037	18.391	18.585
42	19.204	BH	0.067	83018934	19.069	19.279
43	19.386	VH	0.067	140689750	19.279	19.509
44	19.582	PV	0.068	40506861	19.509	19.732
45	19.814	VV	0.065	156039901	19.732	19.943
46	20.839	BH	0.046	69225570	20.698	20.977
47	21.170	BH	0.045	104625167	21.078	21.267
48	21.712	BH	0.062	2471678	21.636	21.804
49	21.911	BH	0.038	9830444	21.860	21.967
50	22.063	VH	0.052	136431959	21.967	22.095
51	22.134	VH	0.042	115069814	22.095	22.188
52	22.270	VH	0.067	116821550	22.188	22.630
53	25.107	BV	0.053	241867095	24.965	25.340
54	25.843	BV	0.052	152934660	25.736	26.073
55	26.250	BV	0.035	1464262	26.150	26.340
56	26.479	PV	0.066	186157908	26.340	26.943

58	27.924	BH	0.057	2214851	27.837	28.071
59	29.112	BH	0.047	87848291	29.021	29.246
60	29.537	BH	0.044	3025115	29.445	29.635
61	30.315	BH	0.054	131338846	30.205	30.337
62	30.362	UH	0.046	132575590	30.337	30.405
63	30.442	UH	0.053	149517143	30.405	30.677
64	31.174	UH	0.074	116855662	31.078	31.340
65	31.401	UH	0.047	9523248	31.340	31.579
66	32.171	PU	0.048	944517	32.046	32.222
67	33.004	BU	0.075	80484791	32.808	33.233
68	33.517	PU	0.047	38089908	33.440	33.549
69	33.587	UU	0.086	41277201	33.549	33.874
70	34.480	PU	0.064	26308361	34.402	34.603
71	34.667	UU	0.070	28258285	34.603	34.975
72	38.937	BU	0.081	14669225	38.830	39.052
73	39.133	UU	0.118	19296600	39.052	39.480
74	40.156	PU	0.125	18285334	40.061	40.597

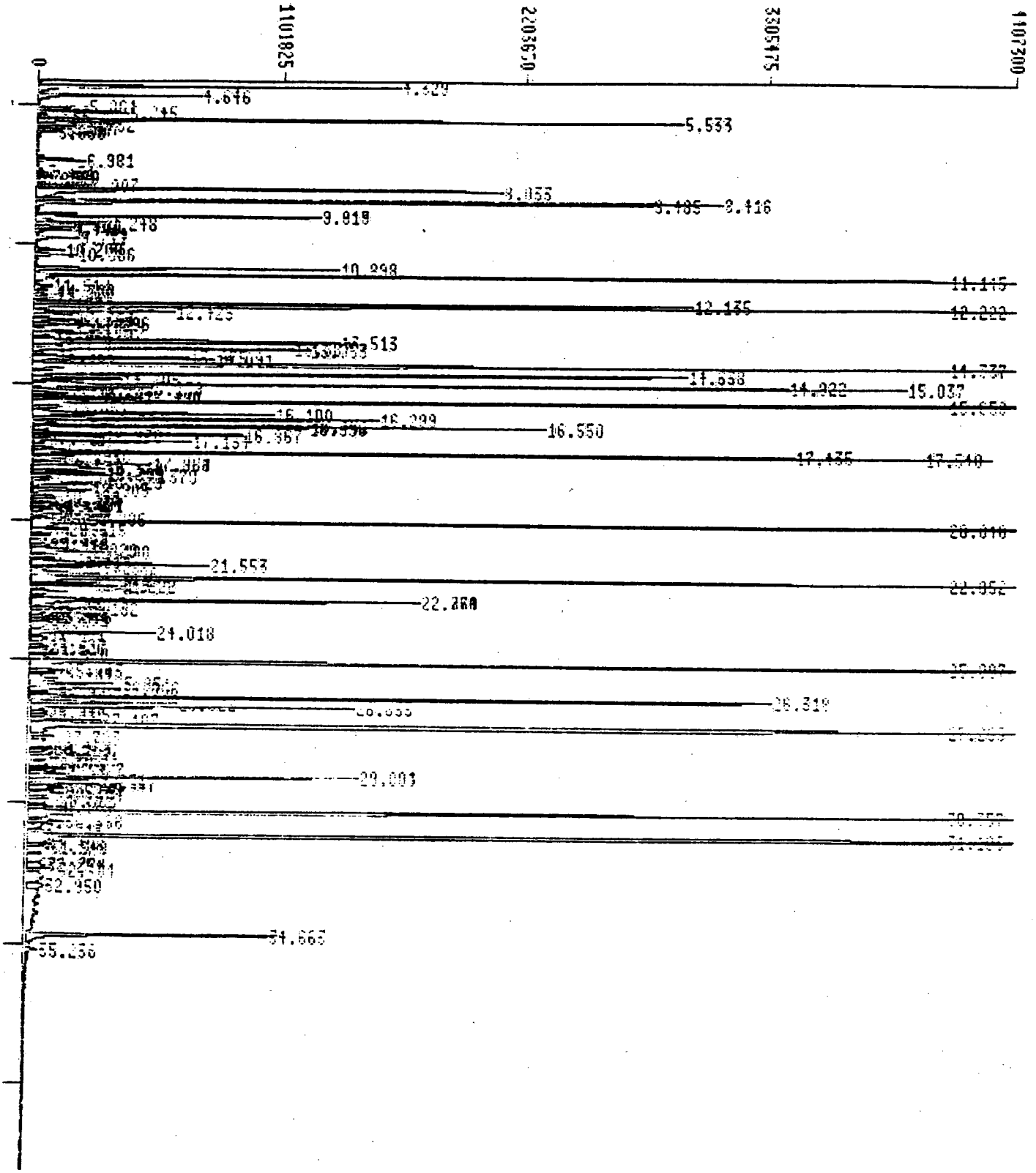
Data file: DATA:B009C06A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871120.044 DF=20 + 40 PPM ISS, 100 PPM SUR 2UL
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 9:07 am
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 6
Replicate num : 1

1: TIC of DATA:B009C06A.D



nd of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009C06A.D
MASTEX LIQ. 871120.044 DF=20 + 40 PPM ISS, 100 PPM SUR 2UL

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.329	BV	0.071	44006829	4.264	4.584
2	4.646	VV	0.047	20715837	4.584	4.927
3	5.064	BV	0.037	4375740	5.017	5.191
4	5.245	PV	0.038	8422724	5.191	5.302
5	5.333	VV	0.041	781159	5.302	5.420
6	5.533	VV	0.041	70938776	5.483	5.686
7	5.732	VV	0.045	6112741	5.686	5.763
8	5.777	VV	0.031	1169681	5.763	5.802
9	5.847	VV	0.044	4035190	5.802	5.910
10	5.958	VV	0.053	3143194	5.910	6.075
11	6.981	VH	0.051	6592273	6.915	7.159
12	7.431	VH	0.047	1317628	7.386	7.458
13	7.570	VH	0.032	1092967	7.521	7.587
14	7.609	VH	0.036	1388342	7.587	7.701
15	7.790	BH	0.036	763486	7.734	7.846
16	7.907	VH	0.047	7106623	7.846	7.957
17	8.033	VH	0.081	86575744	7.957	8.335
18	8.416	VH	0.041	75884342	8.335	8.444
19	8.485	VH	0.057	65943593	8.444	8.690
20	8.913	VH	0.040	4175792	8.828	8.941
21	9.010	VH	0.053	42866092	8.941	9.198
22	9.248	VH	0.055	8380236	9.198	9.332
23	9.400	VH	0.061	5604187	9.332	9.452
24	9.494	VH	0.055	3976075	9.452	9.662
25	9.714	VH	0.036	866377	9.662	9.732
26	9.777	VH	0.045	4991827	9.732	9.826
27	10.208	VH	0.058	3709783	10.091	10.262
28	10.386	VH	0.049	5257973	10.335	10.515
29	10.898	VH	0.058	35234601	10.810	10.995
30	11.145	VH	0.064	125482592	11.064	11.378
31	11.512	PV	0.084	5125035	11.378	11.659
32	11.708	VV	0.053	2473829	11.659	11.758
33	11.822	VV	0.064	3845687	11.758	11.909
34	11.954	VV	0.062	3030464	11.909	12.022
35	12.135	VV	0.053	90289460	12.022	12.171
36	12.222	VV	0.063	159459166	12.171	12.361
37	12.425	VV	0.058	17109519	12.361	12.472
38	12.519	VV	0.084	9612575	12.472	12.612
39	12.654	VV	0.045	1822813	12.612	12.674
40	12.743	VV	0.065	8351244	12.674	12.850
41	12.896	VV	0.049	7446409	12.850	12.971
42	13.014	VV	0.044	1173879	12.971	13.046
43	13.105	VV	0.065	6805301	13.046	13.148
44	13.212	VV	0.081	11637745	13.148	13.311
45	13.346	VV	0.053	2153156	13.311	13.386
46	13.513	VV	0.078	67104690	13.386	13.632
47	13.687	VV	0.058	4931081	13.632	13.703
48	13.753	VV	0.046	34503544	13.703	13.868
49	13.936	VV	0.063	2208504	13.868	13.956
50	13.975	VV	0.037	1315990	13.956	13.998
51	14.091	VV	0.066	30556847	13.998	14.243
52	14.337	VV	0.053	143515783	14.243	14.500
53	14.638	VV	0.053	93591502	14.559	14.736
54	14.805	VV	0.061	15703402	14.736	14.871
55	14.922	VV	0.055	6334390	14.871	14.961
56	15.037	VV	0.056	124688189	14.961	15.095

57	15.138	UU	0.053	17146384	15.055	15.179
58	15.208	UU	0.064	11056585	15.179	15.301
59	15.337	UU	0.050	4910371	15.301	15.376
60	15.401	UU	0.044	3540333	15.376	15.441
61	15.490	UU	0.041	10681571	15.441	15.545
62	15.650	UU	0.055	197777494	15.545	15.765
63	15.851	UU	0.090	7720732	15.765	15.938
64	16.100	UU	0.061	36097549	15.938	16.225
65	16.299	UU	0.049	48237442	16.225	16.347
66	16.369	UU	0.039	7744047	16.347	16.420
67	16.461	UU	0.047	2620555	16.420	16.483
68	16.550	UU	0.038	51413398	16.483	16.576
69	16.596	UU	0.044	31651921	16.576	16.709
70	16.867	UU	0.043	23428808	16.816	16.914
71	16.930	UU	0.035	6453799	16.914	16.981
72	17.024	UU	0.054	2505723	16.981	17.070
73	17.134	UU	0.045	18124076	17.070	17.218
74	17.292	UU	0.063	3745679	17.218	17.344
75	17.435	UU	0.072	4953541	17.344	17.466
76	17.540	UU	0.047	112260889	17.466	17.598
77	17.630	UU	0.052	7339624	17.598	17.675
78	17.696	UU	0.043	2702621	17.675	17.731
79	17.804	UU	0.077	6569425	17.731	17.847
80	17.884	UU	0.045	3227479	17.847	17.904
81	17.950	UU	0.051	14746621	17.904	18.007
82	18.110	UU	0.097	21024263	18.007	18.183
83	18.244	UU	0.051	7458164	18.183	18.267
84	18.309	UU	0.055	10378818	18.267	18.340
85	18.379	UU	0.042	11516966	18.340	18.445
86	18.503	UU	0.060	4473509	18.445	18.554
87	18.629	UU	0.077	17184499	18.554	18.814
88	18.905	UU	0.085	13180566	18.814	18.991
89	19.098	UU	0.045	2220410	19.047	19.125
90	19.171	UU	0.060	5590606	19.125	19.229
91	19.277	UU	0.077	6174749	19.229	19.346
92	19.391	UU	0.049	2922559	19.346	19.416
93	19.477	UU	0.056	5609737	19.416	19.508
94	19.524	UU	0.037	1558038	19.508	19.550
95	19.596	UU	0.074	3815067	19.550	19.655
96	19.774	UU	0.070	4595375	19.702	19.820
97	19.864	UU	0.051	2031562	19.820	19.885
98	19.905	UU	0.047	1922938	19.885	19.947
99	20.040	UU	0.051	158154259	19.947	20.267
100	20.316	UU	0.090	8297736	20.267	20.444
101	20.539	UU	0.070	3378998	20.490	20.588
102	20.631	UU	0.059	2407392	20.588	20.658
103	20.918	UU	0.087	4993570	20.849	20.978
104	21.029	UU	0.056	5664590	20.978	21.060
105	21.100	UU	0.062	9204877	21.060	21.171
106	21.210	UU	0.065	4242581	21.171	21.256
107	21.376	UU	0.056	3647069	21.341	21.424
108	21.553	UU	0.073	31783391	21.424	21.596
109	21.628	UU	0.048	9309557	21.596	21.676
110	21.896	UU	0.074	15298431	21.743	21.969
111	22.052	UU	0.056	160473940	21.969	22.206
112	22.246	UU	0.051	9259396	22.206	22.279
113	22.322	UU	0.046	8332256	22.279	22.343
114	22.369	UU	0.055	12157591	22.343	22.475
115	22.571	UU	0.062	5504633	22.527	22.655
116	22.774	UU	0.042	1612190	22.731	22.789
117	22.860	UU	0.055	58548261	22.789	23.040
118	23.070	UU	0.045	2031720	23.040	23.092
119	23.132	UU	0.051	2747706	23.092	23.150
120	23.182	UU	0.054	5302538	23.150	23.233
121	23.338	UU	0.118	4394893	23.233	23.389

124	23.678	UU	0.159	9854527	23.635	23.925
125	24.018	UU	0.049	17867570	23.925	24.119
126	24.264	UU	0.092	4720797	24.176	24.332
127	24.517	UU	0.056	2185325	24.478	24.546
128	24.586	UU	0.074	3940510	24.546	24.649
129	24.830	UU	0.072	3463787	24.783	24.870
130	25.097	UU	0.056	254099610	25.000	25.369
131	25.403	UU	0.056	5351426	25.369	25.447
132	25.484	UU	0.054	3500477	25.447	25.516
133	25.851	UU	0.064	15979873	25.752	25.955
134	26.006	UU	0.061	16436208	25.955	26.120
135	26.137	UU	0.041	1746592	26.120	26.166
136	26.207	UU	0.061	2907136	26.166	26.246
137	26.318	UU	0.040	80629283	26.246	26.429
138	26.522	UU	0.062	21796595	26.429	26.574
139	26.633	UU	0.048	41026107	26.574	26.766
140	26.842	UU	0.093	5014152	26.766	26.907
141	26.950	UU	0.098	5020805	26.907	27.043
142	27.107	UU	0.054	9413939	27.043	27.155
143	27.295	UU	0.062	247095355	27.155	27.564
144	27.723	UU	0.048	4920871	27.675	27.770
145	28.103	UU	0.057	4324695	28.059	28.154
146	28.196	UU	0.069	3252296	28.154	28.241
147	28.307	UU	0.075	5151053	28.241	28.357
148	28.444	UU	0.058	4587108	28.414	28.491
149	28.506	UU	0.056	3030708	28.491	28.557
150	28.709	UU	0.068	3943279	28.646	28.735
151	28.827	UU	0.051	4850286	28.797	29.873
152	29.004	UU	0.074	7101018	28.915	29.043
153	29.096	UU	0.054	45122925	29.043	29.207
154	29.231	UU	0.052	7499267	29.207	29.292
155	29.347	UU	0.062	10413121	29.292	29.415
156	29.499	UU	0.081	8423741	29.415	29.552
157	29.594	UU	0.056	3411940	29.552	29.622
158	29.684	UU	0.100	10976611	29.622	29.782
159	29.956	UU	0.100	7623487	29.891	30.063
160	30.179	UU	0.084	5500367	30.133	30.256
161	30.357	UU	0.095	184907543	30.256	30.587
162	30.636	UU	0.041	3202452	30.587	30.649
163	30.678	UU	0.063	5959036	30.649	30.743
164	31.015	UU	0.073	4273972	30.964	31.077
165	31.193	UU	0.054	299190872	31.077	31.462
166	31.486	UU	0.071	3495625	31.462	31.551
167	31.648	UU	0.156	10332110	31.551	31.802
168	31.983	UU	0.178	10405482	31.866	32.159
169	32.254	UU	0.110	6376073	32.159	32.331
170	32.404	UU	0.074	6643139	32.331	32.478
171	32.950	UU	0.149	8067751	32.850	33.094
172	34.663	UU	0.068	49501345	34.578	34.976
173	35.236	UU	0.073	2054899	35.118	35.305

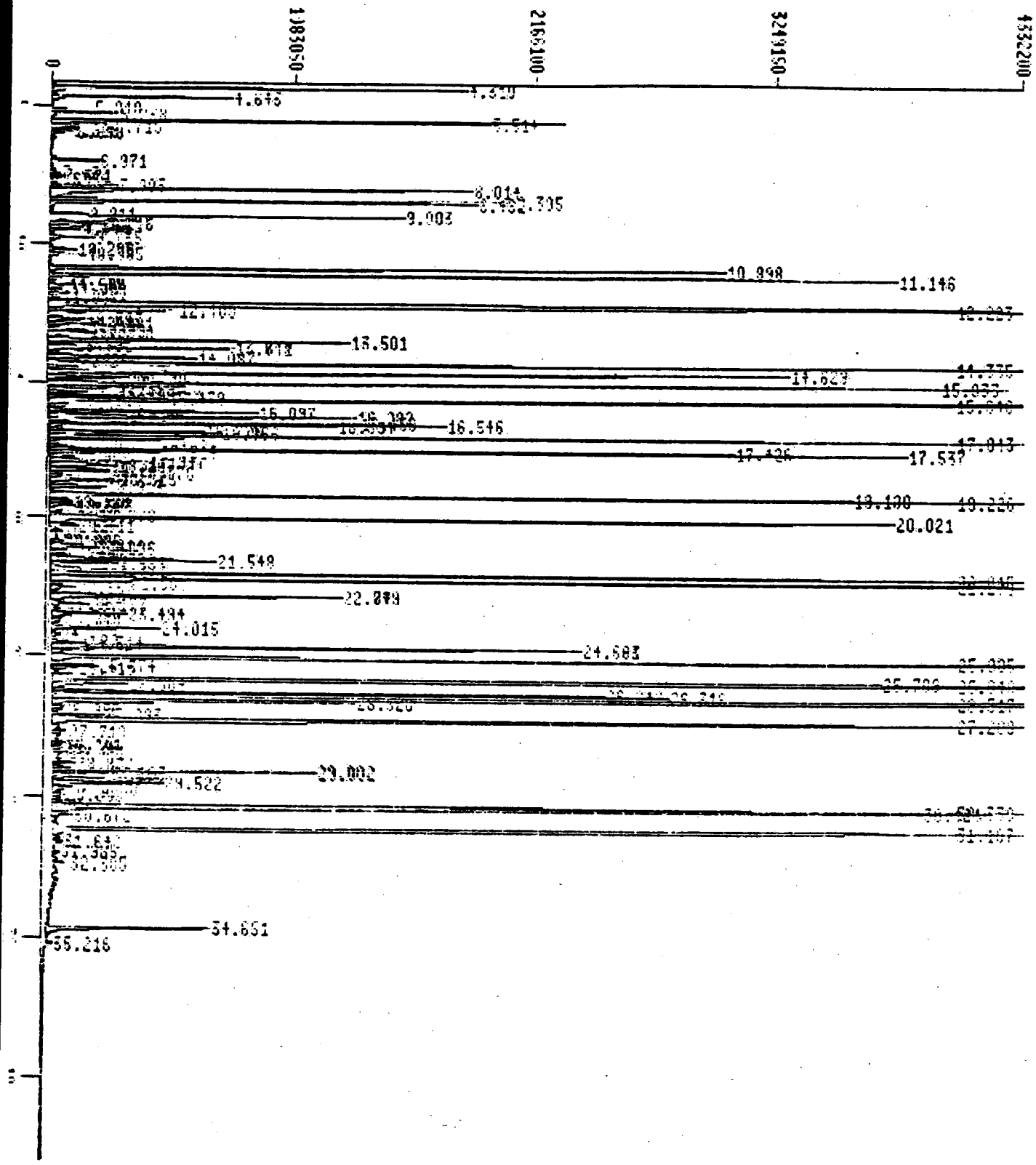
Data file: DATA:B009C07A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871120.044 MS DF=20 + 40 PPM ISS, 100 PPM SUR
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 9:59 am
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 7
Replicate num : 1

1: TIC of DATA:B009C07A.D



End of plot. Time = 4.13 to 43.00 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009C07A.D
WASTEX LIQ. 871120.044 MS DF=20 + 40 PPM ISS, 100 PPM SUR

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.310	BV	0.058	39404752	4.242	4.489
2	4.643	PV	0.058	20647185	4.583	4.983
3	5.048	PV	0.068	4034126	4.983	5.197
4	5.238	PB	0.048	8747117	5.197	5.399
5	5.514	VV	0.044	59281149	5.483	5.672
6	5.715	VV	0.049	7971945	5.672	5.798
7	5.829	VV	0.051	3647858	5.798	5.897
8	5.940	VV	0.048	3183618	5.897	6.076
9	6.971	VV	0.050	6393324	6.914	7.128
10	7.432	VV	0.079	1681950	7.324	7.458
11	7.571	VV	0.039	1298269	7.518	7.590
12	7.606	VV	0.033	1087911	7.590	7.672
13	7.903	VV	0.038	6884138	7.838	7.956
14	8.014	VV	0.087	75429576	7.956	8.329
15	8.395	VV	0.036	43267152	8.329	8.429
16	8.482	VV	0.090	60248391	8.429	8.684
17	8.911	PV	0.049	4006091	8.818	8.940
18	9.003	VV	0.041	37754749	8.940	9.076
19	9.157	VV	0.082	3280047	9.076	9.195
20	9.246	VV	0.064	7683831	9.195	9.332
21	9.396	VV	0.065	5150339	9.332	9.441
22	9.493	VV	0.054	3439265	9.441	9.589
23	9.713	VV	0.041	752686	9.662	9.729
24	9.766	VV	0.044	4813682	9.729	9.822
25	10.206	PV	0.055	3248543	10.075	10.257
26	10.385	VV	0.046	4476013	10.318	10.489
27	10.898	BV	0.047	71316514	10.721	10.993
28	11.146	VV	0.046	108640836	11.056	11.214
29	11.240	VB	0.061	3428660	11.214	11.361
30	11.508	BV	0.085	4982582	11.383	11.659
31	11.708	VV	0.048	2561099	11.659	11.759
32	11.821	VV	0.061	3158452	11.759	11.910
33	11.957	VV	0.059	2257402	11.910	12.025
34	12.223	VV	0.077	333582538	12.025	12.358
35	12.409	VV	0.047	16347663	12.358	12.470
36	12.501	VV	0.086	9172354	12.470	12.610
37	12.657	VV	0.047	1682736	12.610	12.671
38	12.741	VV	0.078	7610897	12.671	12.847
39	12.881	VV	0.048	6716651	12.847	12.967
40	13.012	VV	0.042	1221298	12.967	13.038
41	13.099	VV	0.065	6246570	13.038	13.145
42	13.210	VV	0.094	12874263	13.145	13.380
43	13.501	VV	0.064	51644253	13.380	13.578
44	13.591	VV	0.036	2111568	13.578	13.618
45	13.644	VV	0.038	2248813	13.618	13.660
46	13.742	VV	0.061	32562391	13.660	13.862
47	13.933	VV	0.064	2271968	13.862	13.958
48	14.087	VV	0.061	26479313	13.997	14.188
49	14.335	VV	0.066	135523838	14.188	14.407
50	14.427	VV	0.057	4354295	14.407	14.496
51	14.629	PV	0.044	81200042	14.555	14.711
52	14.790	VV	0.066	13786862	14.711	14.862
53	14.909	VV	0.058	5082059	14.862	14.944
54	15.033	VV	0.045	114280764	14.944	15.086
55	15.128	VV	0.048	15525959	15.086	15.171
56	15.197	VV	0.055	8849728	15.171	15.259

124	25.709	UU	0.043	2734132	25.661	25.734
125	25.849	UU	0.064	280419967	25.734	25.953
126	26.004	UU	0.063	13754455	25.953	26.159
127	26.248	UU	0.051	8860578	26.159	26.267
128	26.316	UU	0.044	68261251	26.267	26.379
129	26.517	UU	0.076	359491249	26.379	26.574
130	26.620	UU	0.046	35498762	26.574	26.773
131	26.955	UU	0.063	1724305	26.909	27.019
132	27.093	UU	0.045	6517215	27.019	27.141
133	27.289	UU	0.056	189634490	27.141	27.450
134	27.719	UU	0.054	2299735	27.674	27.766
135	28.101	UU	0.055	1981515	28.054	28.150
136	28.293	UU	0.067	1894347	28.236	28.353
137	28.441	UU	0.063	2509562	28.353	28.477
138	28.822	UU	0.050	2872914	28.761	28.867
139	29.002	UU	0.065	2930017	28.915	29.028
140	29.092	UU	0.044	28376569	29.028	29.138
141	29.163	UU	0.040	5204338	29.138	29.193
142	29.226	UU	0.054	4277893	29.193	29.284
143	29.345	UU	0.046	5808302	29.284	29.406
144	29.522	UU	0.059	17678248	29.406	29.620
145	29.680	UU	0.121	7166354	29.620	29.885
146	29.953	UU	0.064	2122182	29.885	30.003
147	30.177	UU	0.058	1460532	30.129	30.222
148	30.339	UU	0.065	121198375	30.222	30.381
149	30.424	UU	0.040	125756548	30.381	30.591
150	30.672	UU	0.072	4257427	30.591	30.743
151	31.187	UU	0.055	257191054	31.054	31.428
152	31.642	UU	0.108	2743178	31.533	31.766
153	31.985	UU	0.082	1306235	31.868	32.033
154	32.385	UU	0.047	1826159	32.317	32.483
155	34.651	PU	0.072	32017697	34.562	34.877
156	35.216	PU	0.052	1004015	35.130	35.293

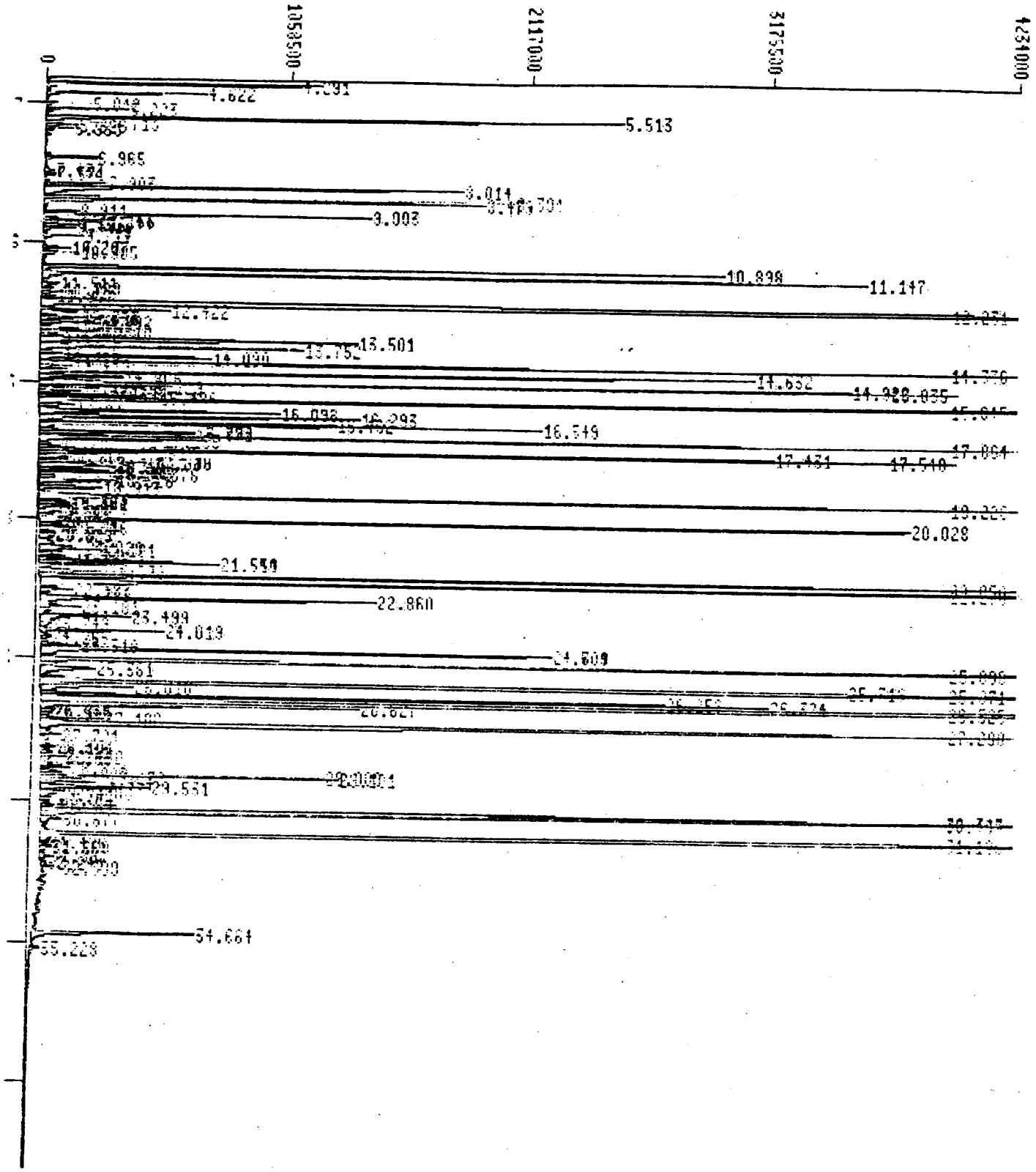
Data file: DATA:B009C08A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871120.044 MSD DF=20 + 40 PPM ISS, 100 PPM SUR
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 10:50 am
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 8
Replicate num : 1

1: TIC of DATA:B009C08A.D



nd of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009C08A.D
WASTEX LIQ. 871120.044 MSD DF=20 * 40 PPM ISS, 100 PPM SUR

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.291	BV	0.047	35290306	4.242	4.473
2	4.622	VV	0.060	17570405	4.560	4.983
3	5.042	PV	0.036	3802819	4.983	5.163
4	5.223	PV	0.037	7438421	5.163	5.284
5	5.513	PV	0.036	53798281	5.393	5.664
6	5.713	VV	0.044	7391227	5.664	5.783
7	5.826	VV	0.047	3919708	5.783	5.894
8	5.939	VV	0.057	2910406	5.894	6.054
9	6.965	VB	0.046	5968359	6.911	7.129
10	7.432	VH	0.083	2090948	7.321	7.517
11	7.571	PH	0.065	2165136	7.517	7.721
12	7.903	VH	0.042	6446448	7.838	7.955
13	8.014	PH	0.090	74200437	7.955	8.267
14	8.394	VH	0.038	42797255	8.330	8.430
15	8.479	VH	0.051	57111111	8.430	8.679
16	8.911	VH	0.047	3906760	8.826	8.940
17	9.003	VH	0.045	36399242	8.940	9.088
18	9.156	VH	0.080	2741488	9.088	9.194
19	9.244	VH	0.050	7334540	9.194	9.331
20	9.396	VH	0.057	5052274	9.331	9.447
21	9.491	VH	0.050	3771154	9.447	9.662
22	9.714	VH	0.034	695054	9.662	9.731
23	9.777	VH	0.045	4818565	9.731	9.827
24	10.207	VH	0.054	3373836	10.075	10.253
25	10.385	VH	0.039	4350741	10.336	10.477
26	10.898	VH	0.065	65573852	10.809	11.063
27	11.147	VH	0.071	110187406	11.063	11.392
28	11.511	VH	0.036	4461015	11.392	11.658
29	11.709	VH	0.050	2601277	11.658	11.785
30	11.823	VH	0.066	2797004	11.785	11.909
31	11.957	VH	0.061	2237084	11.909	12.025
32	12.231	VH	0.083	347145759	12.025	12.359
33	12.422	VH	0.050	16004205	12.359	12.471
34	12.518	VH	0.096	9173527	12.471	12.614
35	12.656	VH	0.046	1744443	12.614	12.675
36	12.743	VH	0.076	7464635	12.675	12.843
37	12.892	VH	0.052	7017645	12.843	12.972
38	13.018	VH	0.046	1144842	12.972	13.045
39	13.105	VH	0.068	6501051	13.045	13.147
40	13.210	VH	0.074	10637761	13.147	13.306
41	13.342	VH	0.058	2200418	13.306	13.383
42	13.501	VH	0.072	58860596	13.383	13.621
43	13.752	VH	0.062	36957202	13.621	13.871
44	13.936	VH	0.077	3216199	13.871	13.998
45	14.090	VH	0.069	27936865	13.998	14.232
46	14.336	VH	0.061	127793604	14.232	14.390
47	14.419	VH	0.090	7330263	14.390	14.551
48	14.632	VH	0.045	85230197	14.551	14.704
49	14.806	VH	0.070	15606500	14.704	14.874
50	14.922	VH	0.059	6440058	14.874	14.963
51	15.035	VH	0.048	115732023	14.963	15.092
52	15.129	VH	0.048	16288821	15.092	15.175
53	15.210	VH	0.053	9189256	15.175	15.263
54	15.331	VH	0.044	4465365	15.302	15.372
55	15.397	VH	0.043	3137781	15.372	15.437
56	15.486	VH	0.042	10493114	15.437	15.540

58	15.847	VH	0.073	7012371	15.767	15.934
59	16.098	VH	0.064	34156660	15.934	16.223
60	16.293	VH	0.059	51808312	16.223	16.421
61	16.462	VH	0.045	2583149	16.421	16.482
62	16.549	VH	0.060	78553405	16.482	16.720
63	16.793	VH	0.071	3219306	16.720	16.818
64	16.872	VH	0.063	28796220	16.818	16.974
65	17.064	VH	0.053	158316004	16.974	17.096
66	17.135	PU	0.043	18015674	17.096	17.223
67	17.293	VV	0.060	3159152	17.223	17.340
68	17.431	VV	0.071	4209442	17.340	17.453
69	17.540	VV	0.042	98792696	17.453	17.589
70	17.617	VV	0.052	13460336	17.589	17.676
71	17.697	VV	0.036	2279647	17.676	17.728
72	17.806	VV	0.067	5886728	17.728	17.844
73	17.880	VV	0.043	3083991	17.844	17.902
74	17.948	VV	0.048	13265630	17.902	18.007
75	18.108	VV	0.091	20431250	18.007	18.187
76	18.241	VV	0.045	6228978	18.187	18.262
77	18.303	VV	0.054	10367488	18.262	18.340
78	18.376	VV	0.045	10354175	18.340	18.443
79	18.507	VV	0.060	4061836	18.443	18.560
80	18.626	VV	0.077	15821509	18.560	18.816
81	18.913	VV	0.074	12416118	18.816	19.004
82	19.226	VV	0.056	182113730	19.004	19.349
83	19.391	VV	0.050	3346857	19.349	19.424
84	19.472	VV	0.064	5484132	19.424	19.527
85	19.596	VV	0.068	5999420	19.527	19.684
86	19.772	VV	0.098	4186647	19.684	19.823
87	19.866	VV	0.071	3162886	19.823	19.938
88	20.028	VV	0.054	136857362	19.938	20.178
89	20.201	VV	0.069	3801381	20.178	20.268
90	20.316	VV	0.089	6686255	20.268	20.427
91	20.541	VV	0.057	2733081	20.493	20.586
92	20.629	VV	0.087	4655964	20.586	20.744
93	21.029	VV	0.058	5445950	20.964	21.059
94	21.101	VV	0.053	7990888	21.059	21.169
95	21.212	VV	0.056	3696234	21.169	21.259
96	21.373	VV	0.049	2932017	21.345	21.420
97	21.510	VV	0.040	13266427	21.420	21.527
98	21.551	VV	0.043	19155380	21.527	21.602
99	21.641	VV	0.058	11602176	21.602	21.794
100	21.896	VV	0.066	12274510	21.794	21.969
101	22.050	VV	0.051	130192097	21.969	22.148
102	22.276	VV	0.076	190750480	22.148	22.440
103	22.487	VV	0.069	3025665	22.440	22.529
104	22.573	VV	0.062	5082991	22.528	22.659
105	22.860	VV	0.056	54047182	22.732	23.045
106	23.181	VV	0.060	6201416	23.090	23.238
107	23.499	VV	0.081	16841654	23.434	23.717
108	23.749	VV	0.110	4213352	23.717	23.928
109	24.019	VV	0.051	16442853	23.928	24.136
110	24.265	VV	0.079	2644446	24.222	24.359
111	24.518	VV	0.050	2519658	24.470	24.557
112	24.609	VV	0.039	5479035	24.557	24.627
113	24.704	VV	0.070	92214010	24.627	24.880
114	25.098	VV	0.056	225948410	24.940	25.207
115	25.381	VV	0.093	15909458	25.285	25.609
116	25.716	VV	0.045	3227859	25.667	25.741
117	25.871	VV	0.061	296619279	25.741	25.960
118	26.010	VV	0.071	16933253	25.960	26.171
119	26.256	VV	0.050	10255624	26.171	26.274
120	26.324	VV	0.041	74249088	26.274	26.386
121	26.525	VV	0.069	372520826	26.386	26.586
122	26.627	VV	0.049	39522799	26.586	26.779

123	26.835	UU	0.084	3158613	26.779	26.901
124	26.945	UU	0.076	2626682	26.901	27.013
125	27.100	UU	0.047	7935087	27.013	27.149
126	27.298	UU	0.055	203944156	27.149	27.440
127	27.721	UU	0.054	3022670	27.679	27.766
128	28.101	UU	0.059	2510507	28.060	28.152
129	28.311	UU	0.074	2642399	28.246	28.370
130	28.450	UU	0.056	3370862	28.370	28.482
131	28.509	UU	0.085	2819500	28.482	28.603
132	28.833	UU	0.046	3005337	28.784	28.872
133	29.009	UU	0.070	3617701	28.926	29.038
134	29.101	UU	0.043	30400323	29.038	29.137
135	29.172	UU	0.073	13218817	29.137	29.295
136	29.354	UU	0.049	6795653	29.295	29.406
137	29.531	UU	0.070	20586584	29.406	29.627
138	29.688	UU	0.056	3799350	29.627	29.715
139	29.741	UU	0.063	5374883	29.715	29.894
140	29.962	UU	0.062	3240375	29.894	30.030
141	30.185	UU	0.048	1707583	30.140	30.215
142	30.347	UU	0.064	127192012	30.250	30.390
143	30.435	UU	0.050	132271303	30.390	30.597
144	30.677	UU	0.092	6441605	30.597	30.805
145	31.196	UU	0.063	269737828	31.081	31.438
146	31.478	UU	0.070	1707150	31.438	31.541
147	31.660	UU	0.093	3312078	31.612	31.858
148	31.991	UU	0.108	2638831	31.858	32.150
149	32.241	PU	0.101	1738942	32.150	32.342
150	32.399	UU	0.046	2261128	32.342	32.451
151	34.664	PU	0.075	31507116	34.525	35.022
152	35.228	UU	0.058	1276912	35.144	35.377

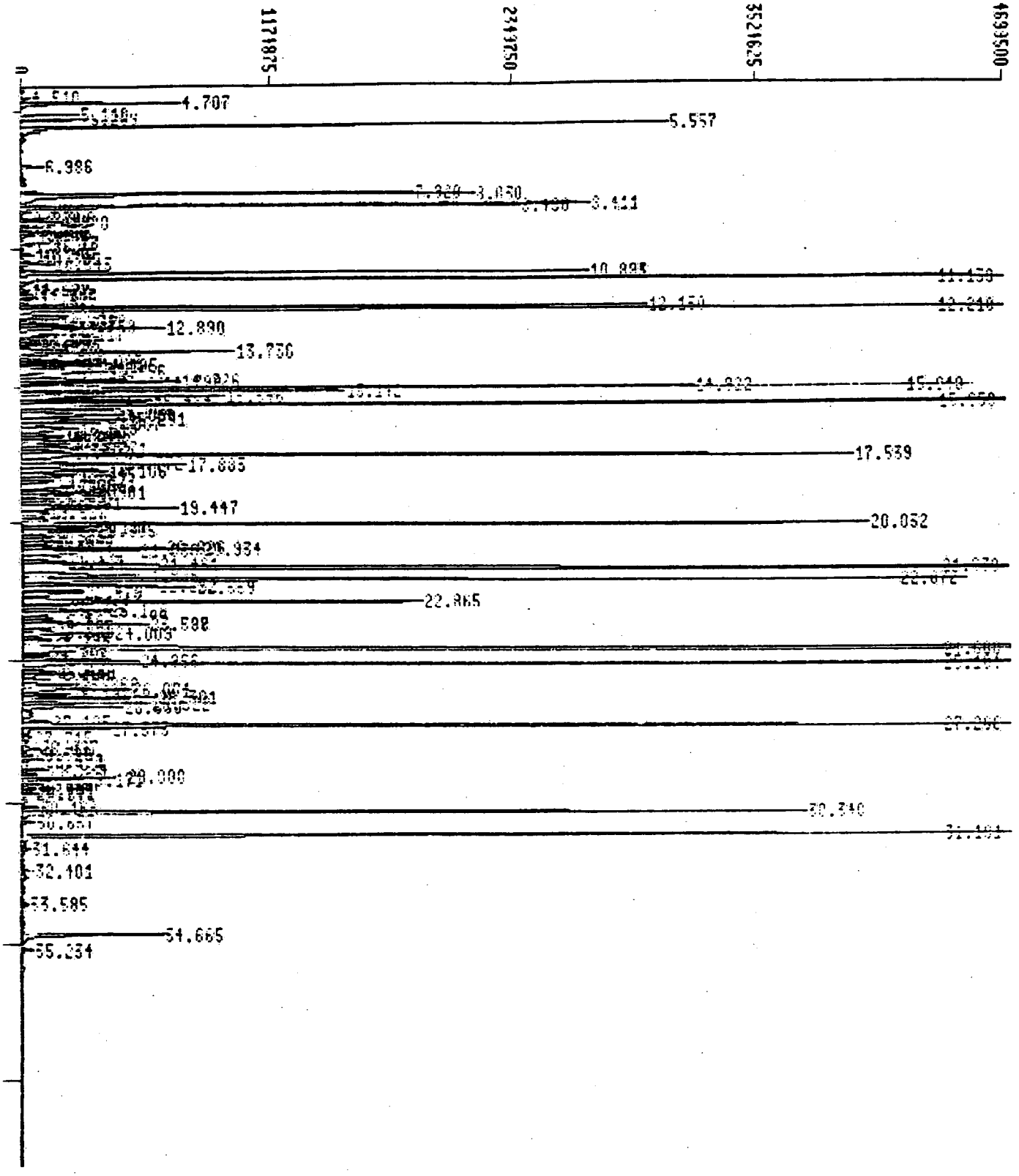
Data file: DATA:B009C09A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871120.045 DF=40 + 40 PPM ISS 100 PPM SUR
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 11:41 am
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 9
Replicate num : 1

TIC of DATA:B009C09A.D



nd of plot. Time = 4.13 to 43.01 minutes Chart speed = 0.51 cm/min

'IC of DATA:B009C09A.D
MASTEX LIQ. 871120.045 DF=40 + 40 PPM ISS, 100 PPM SUR

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.510	VV	0.036	1000926	4.444	4.561
2	4.707	PB	0.047	19766852	4.652	4.995
3	5.110	BV	0.032	4797096	5.051	5.214
4	5.289	PV	0.035	6530252	5.214	5.354
5	5.557	BV	0.068	73215500	5.477	5.936
6	6.986	PV	0.049	3289402	6.932	7.184
7	7.920	VH	0.040	2309390	7.854	7.957
8	8.030	VH	0.063	85174037	7.957	8.345
9	8.411	VH	0.041	60525030	8.345	8.448
10	8.490	VH	0.049	71471357	8.448	8.611
11	8.651	VH	0.067	2525619	8.611	8.835
12	8.906	VH	0.050	3547809	8.835	8.987
13	9.028	PV	0.050	5756046	8.987	9.084
14	9.106	VV	0.046	1039082	9.084	9.147
15	9.173	VV	0.043	925396	9.147	9.212
16	9.243	VV	0.045	1787270	9.212	9.287
17	9.305	VV	0.042	1257230	9.287	9.343
18	9.395	VV	0.051	3371538	9.343	9.447
19	9.490	VV	0.046	1873897	9.447	9.557
20	9.713	VV	0.034	893522	9.666	9.735
21	9.778	VV	0.046	2931831	9.735	9.821
22	9.850	VV	0.080	2693624	9.821	9.962
23	10.205	VV	0.054	2356650	10.082	10.255
24	10.385	VV	0.051	3236264	10.333	10.494
25	10.543	VV	0.050	4594683	10.494	10.666
26	10.821	VV	0.048	2342837	10.725	10.840
27	10.893	VV	0.042	61879339	10.840	11.003
28	11.139	VV	0.046	128581558	11.061	11.207
29	11.238	VV	0.077	3072845	11.207	11.394
30	11.522	VV	0.075	1637033	11.394	11.582
31	11.703	VV	0.057	2694332	11.653	11.760
32	11.815	VV	0.048	2239681	11.760	11.855
33	11.882	VV	0.092	2445815	11.855	11.970
34	12.130	VV	0.052	87702433	12.035	12.171
35	12.218	VV	0.053	146719097	12.171	12.363
36	12.428	VV	0.066	9224509	12.363	12.533
37	12.581	VV	0.048	4707004	12.533	12.623
38	12.647	VV	0.065	2682167	12.623	12.710
39	12.759	VV	0.056	7739392	12.710	12.831
40	12.890	VV	0.048	19495973	12.831	12.978
41	13.117	VV	0.068	8958126	13.035	13.199
42	13.231	VV	0.069	3270927	13.199	13.291
43	13.340	VV	0.069	3250767	13.291	13.402
44	13.453	VV	0.045	2741864	13.402	13.477
45	13.497	VV	0.049	2512198	13.477	13.546
46	13.736	VV	0.054	35294671	13.627	13.847
47	13.908	VV	0.066	4545986	13.847	13.947
48	13.969	VV	0.052	3001429	13.947	14.030
49	14.083	VV	0.052	8747281	14.030	14.144
50	14.195	VV	0.044	8758378	14.144	14.235
51	14.310	VV	0.085	9698827	14.235	14.386
52	14.456	VV	0.069	17694696	14.386	14.553
53	14.620	VV	0.068	9675499	14.553	14.681
54	14.726	VV	0.049	15826651	14.681	14.756
55	14.799	VV	0.055	25582954	14.756	14.867
56	14.922	VV	0.053	7508023	14.867	14.951

57	15.048	UU	0.053	140347484	14.951	15.086
58	15.142	UU	0.048	41232039	15.086	15.186
59	15.211	UU	0.055	12640827	15.186	15.283
60	15.346	UU	0.051	27747177	15.283	15.436
61	15.484	UU	0.052	16095993	15.436	15.546
62	15.659	UU	0.057	203668783	15.546	15.755
63	15.808	UU	0.072	21758087	15.755	15.929
64	16.058	UU	0.089	28500706	15.929	16.168
65	16.231	UU	0.074	21638001	16.168	16.323
66	16.367	UU	0.071	15715486	16.323	16.492
67	16.548	UU	0.106	19889807	16.492	16.728
68	16.794	UU	0.075	5089461	16.728	16.822
69	16.865	UU	0.077	9461251	16.822	16.957
70	17.022	UU	0.072	10677991	16.957	17.085
71	17.133	UU	0.071	10613709	17.085	17.221
72	17.271	UU	0.071	13382796	17.221	17.357
73	17.407	UU	0.065	7845543	17.357	17.450
74	17.539	UU	0.052	115643076	17.450	17.686
75	17.772	UU	0.092	11208673	17.686	17.818
76	17.883	UU	0.070	29999020	17.818	17.999
77	18.106	UU	0.087	23143795	17.999	18.181
78	18.245	UU	0.087	14396715	18.181	18.335
79	18.381	UU	0.072	9061344	18.335	18.445
80	18.477	UU	0.075	6896086	18.445	18.540
81	18.631	UU	0.115	22326751	18.540	18.764
82	18.797	UU	0.056	4437788	18.764	18.831
83	18.901	UU	0.076	14678634	18.831	18.966
84	18.991	UU	0.067	4709563	18.966	19.051
85	19.100	UU	0.055	4574649	19.051	19.127
86	19.172	UU	0.066	5376870	19.127	19.211
87	19.281	UU	0.086	11458710	19.211	19.350
88	19.447	UU	0.064	29803075	19.350	19.539
89	19.587	UU	0.132	11834725	19.539	19.730
90	19.896	UU	0.081	7093034	19.822	19.940
91	20.032	UU	0.066	130066500	19.940	20.143
92	20.187	UU	0.068	14606483	20.143	20.252
93	20.305	UU	0.075	15115134	20.252	20.370
94	20.391	UU	0.077	6737032	20.370	20.468
95	20.513	UU	0.081	8733866	20.468	20.589
96	20.640	UU	0.067	6836232	20.589	20.685
97	20.711	UU	0.097	6835241	20.685	20.792
98	20.826	UU	0.061	4666661	20.792	20.863
99	20.934	UU	0.053	24060808	20.863	20.979
100	21.030	UU	0.090	34593764	20.979	21.197
101	21.229	UU	0.106	13083276	21.197	21.363
102	21.414	UU	0.053	6481574	21.363	21.436
103	21.461	UU	0.036	4333240	21.436	21.476
104	21.639	UU	0.094	277612791	21.476	21.795
105	21.896	UU	0.081	30715458	21.795	21.981
106	22.072	UU	0.071	146559868	21.981	22.193
107	22.252	UU	0.052	14747241	22.193	22.279
108	22.339	UU	0.079	44567729	22.279	22.431
109	22.479	UU	0.071	12759515	22.431	22.533
110	22.576	UU	0.074	11419991	22.533	22.653
111	22.865	UU	0.063	75238275	22.746	22.944
112	22.962	UU	0.069	11734354	22.944	23.037
113	23.073	UU	0.055	5411709	23.037	23.096
114	23.122	UU	0.038	4511649	23.096	23.142
115	23.188	UU	0.058	13268628	23.142	23.248
116	23.472	UU	0.105	10949226	23.377	23.538
117	23.597	UU	0.067	7280477	23.538	23.628
118	23.688	UU	0.050	17188551	23.628	23.721
119	23.757	UU	0.097	10306393	23.721	23.851
120	23.890	UU	0.069	5403281	23.851	23.936
121	24.009	UU	0.062	18789433	23.936	24.149

123	24.264	VV	0.116	9133511	24.217	24.399
124	24.600	VV	0.095	538179109	24.399	24.720
125	24.757	VV	0.066	5660070	24.720	24.800
126	24.826	VV	0.064	4822623	24.800	24.874
127	24.966	VV	0.051	12317231	24.915	25.012
128	25.104	VV	0.064	209362679	25.012	25.232
129	25.267	VV	0.062	4570858	25.232	25.312
130	25.419	VV	0.063	5769039	25.373	25.459
131	25.488	VV	0.086	6505371	25.459	25.603
132	25.692	VV	0.091	7492861	25.603	25.798
133	25.866	VV	0.071	11353142	25.798	25.948
134	26.004	VV	0.064	19452986	25.948	26.139
135	26.197	VV	0.056	8275563	26.139	26.249
136	26.301	VV	0.049	19923710	26.249	26.434
137	26.522	VV	0.045	16357221	26.434	26.571
138	26.630	VV	0.054	16926837	26.571	26.749
139	27.105	VV	0.051	3882996	27.043	27.157
140	27.286	VV	0.051	169019339	27.157	27.344
141	27.375	VV	0.057	13478517	27.344	27.569
142	27.715	VV	0.086	2702774	27.623	27.782
143	28.097	VV	0.106	4215881	27.962	28.172
144	28.320	VV	0.055	1620903	28.255	28.364
145	28.450	VV	0.057	3399355	28.364	28.478
146	28.501	VV	0.051	2901900	28.478	28.588
147	28.834	VV	0.044	3264200	28.786	28.884
148	28.998	VV	0.065	2892364	28.884	29.040
149	29.088	VV	0.045	13283163	29.040	29.131
150	29.171	VV	0.058	10969503	29.131	29.286
151	29.337	VV	0.053	2942420	29.286	29.391
152	29.491	VV	0.076	2910990	29.391	29.544
153	29.585	VV	0.052	1718488	29.544	29.628
154	29.671	VV	0.054	1838427	29.628	29.713
155	29.737	VV	0.047	1385711	29.713	29.823
156	30.163	VV	0.058	2199511	30.069	30.248
157	30.340	PV	0.051	116433044	30.248	30.562
158	30.637	VV	0.100	2331546	30.606	30.769
159	31.191	PV	0.049	206560918	31.032	31.377
160	31.644	VV	0.079	1646372	31.533	31.803
161	32.401	BV	0.040	1132574	32.340	32.465
162	33.585	PV	0.064	1156667	33.495	33.671
163	34.665	PV	0.070	31677432	34.507	35.031
164	35.234	VV	0.060	2350939	35.168	35.385

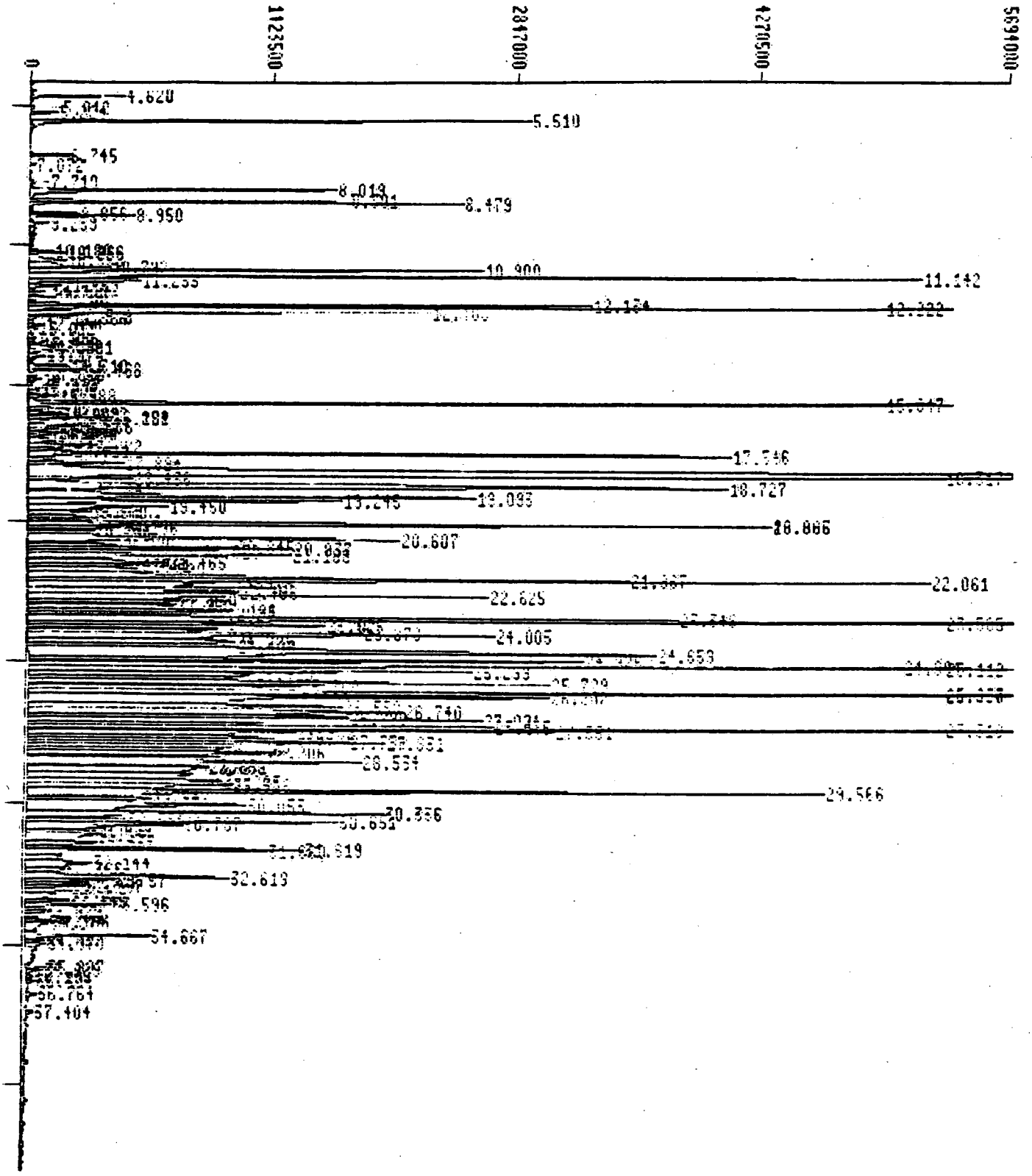
Data file: DATA:B009C10A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871123.012 DF=20 + 40 PPM ISS, 100 PPM SUR
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 12:32 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 10
Replicate num : 1

: TIC of DATA:B009C10A.D



nd of plot. Time = 4.13 to 43.02 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009C10A.D
WASTEX LIQ. 871123.012 DF=20 + 40 PPM ISS, 100 PPM SUR

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.620	PV	0.045	14571471	4.567	4.914
2	5.042	PV	0.032	3036344	4.914	5.141
3	5.224	PB	0.039	3705691	5.141	5.312
4	5.510	BV	0.043	65169622	5.437	5.735
5	6.745	VV	0.047	6622236	6.687	6.871
6	7.072	VB	0.049	647672	7.023	7.183
7	7.719	BH	0.047	2270234	7.641	7.771
8	8.019	PV	0.065	75623802	7.954	8.320
9	8.391	VV	0.038	41757937	8.320	8.434
10	8.479	VV	0.063	56838679	8.434	8.633
11	8.856	VV	0.040	6688029	8.795	8.900
12	8.950	VV	0.040	14172682	8.900	9.064
13	9.239	VV	0.070	4395877	9.170	9.342
14	10.180	VV	0.039	889774	10.107	10.200
15	10.266	VV	0.051	6754665	10.200	10.333
16	10.558	VV	0.129	16000446	10.333	10.615
17	10.792	VV	0.112	26685885	10.615	10.840
18	10.900	VV	0.054	84445530	10.840	10.980
19	11.142	VV	0.053	167851155	10.980	11.201
20	11.253	VV	0.095	44495608	11.201	11.381
21	11.459	VV	0.079	9236272	11.381	11.551
22	11.706	VV	0.053	3677385	11.640	11.756
23	11.887	VV	0.059	4919232	11.827	11.963
24	12.007	VV	0.052	1077273	11.963	12.038
25	12.134	VV	0.046	80613890	12.038	12.166
26	12.222	VV	0.046	141293596	12.166	12.330
27	12.403	VV	0.049	63646540	12.330	12.493
28	12.519	VV	0.048	8695760	12.493	12.560
29	12.584	VV	0.044	5930049	12.560	12.655
30	12.856	VV	0.071	3730860	12.768	12.944
31	13.011	VV	0.077	2430508	12.944	13.077
32	13.300	VV	0.078	2533850	13.189	13.344
33	13.499	VV	0.072	1922710	13.454	13.560
34	13.681	VV	0.127	11833006	13.560	13.737
35	13.780	VV	0.073	4933053	13.737	13.871
36	13.970	VV	0.074	5002823	13.871	14.035
37	14.310	VV	0.057	9290822	14.129	14.406
38	14.468	VV	0.056	8702399	14.406	14.569
39	14.616	VV	0.057	4028057	14.569	14.688
40	14.783	VV	0.065	2809389	14.738	14.867
41	15.094	VV	0.069	3140340	15.026	15.143
42	15.206	VV	0.102	4174885	15.143	15.332
43	15.388	VV	0.055	5373937	15.332	15.469
44	15.647	VV	0.058	201727743	15.469	15.785
45	15.835	VV	0.055	8224582	15.785	15.896
46	15.973	VV	0.091	5052537	15.896	16.021
47	16.086	VV	0.061	6642552	16.021	16.133
48	16.154	VV	0.035	1410166	16.133	16.171
49	16.222	VV	0.044	12611426	16.171	16.264
50	16.286	VV	0.067	9548336	16.264	16.398
51	16.444	VV	0.060	2882650	16.398	16.466
52	16.535	VV	0.077	13637359	16.466	16.623
53	16.648	VV	0.069	7401100	16.623	16.744
54	16.793	VV	0.054	5796264	16.744	16.826
55	16.855	VV	0.073	8339348	16.826	16.968
56	17.027	VV	0.077	5635587	16.968	17.076

	17.272	UU	0.079	18559871	17.169	17.363
	17.411	UU	0.074	8070312	17.363	17.454
1	17.546	UU	0.054	144307168	17.454	17.666
	17.689	UU	0.069	5258814	17.666	17.751
2	17.824	UU	0.064	6372160	17.751	17.842
3	17.894	UU	0.067	22533901	17.842	17.964
4	18.317	UU	0.123	1115356684	17.964	18.392
5	18.436	UU	0.074	26690609	18.392	18.534
6	18.727	UU	0.125	297971769	18.534	18.813
7	18.841	UU	0.094	24687719	18.813	18.918
8	19.093	UU	0.088	149947699	18.918	19.178
9	19.245	UU	0.066	78942131	19.178	19.375
10	19.450	UU	0.100	59772829	19.375	19.605
11	19.670	UU	0.079	18069428	19.605	19.703
12	19.813	UU	0.110	17710227	19.767	19.877
13	19.921	UU	0.058	14067579	19.877	19.948
14	19.996	UU	0.048	15872195	19.948	20.011
15	20.065	UU	0.065	164464756	20.011	20.156
16	20.196	UU	0.078	30235084	20.156	20.268
17	20.293	UU	0.083	20307159	20.268	20.359
18	20.390	UU	0.066	15977348	20.359	20.437
19	20.607	UU	0.076	108377272	20.437	20.706
20	20.780	UU	0.082	21264558	20.706	20.799
21	20.845	UU	0.070	21236009	20.799	20.877
22	20.937	UU	0.062	55778468	20.877	20.986
23	21.029	UU	0.073	56144873	20.986	21.115
24	21.188	UU	0.068	68567574	21.115	21.264
25	21.296	UU	0.059	18580315	21.264	21.326
26	21.465	UU	0.119	63890295	21.326	21.515
27	21.561	UU	0.109	39072046	21.515	21.634
28	21.720	UU	0.111	56960019	21.634	21.793
29	21.967	UU	0.096	123591784	21.793	21.997
90	22.061	UU	0.060	197929934	21.997	22.123
91	22.158	UU	0.136	109429856	22.123	22.317
92	22.348	UU	0.073	63832338	22.317	22.418
93	22.486	UU	0.108	76682474	22.418	22.554
94	22.625	UU	0.090	142888584	22.554	22.765
95	22.830	UU	0.083	56053642	22.765	22.879
96	22.911	UU	0.053	25868542	22.879	22.933
97	22.980	UU	0.098	60774564	22.933	23.060
98	23.121	UU	0.070	42545414	23.060	23.141
99	23.186	UU	0.062	43705758	23.141	23.212
00	23.252	UU	0.073	54949010	23.212	23.304
01	23.348	UU	0.053	31727356	23.304	23.362
02	23.505	UU	0.086	592000656	23.362	23.584
103	23.626	UU	0.067	47807931	23.584	23.656
104	23.702	UU	0.099	101804229	23.656	23.791
105	23.812	UU	0.055	35691660	23.791	23.847
106	23.878	UU	0.081	50004369	23.847	23.932
107	24.005	UU	0.110	218832864	23.932	24.199
108	24.285	UU	0.104	92238786	24.199	24.338
109	24.408	UU	0.091	63003107	24.338	24.433
110	24.659	UU	0.168	463351554	24.433	24.867
111	24.926	UU	0.065	124658086	24.867	24.973
112	24.994	UU	0.052	57819333	24.973	25.033
113	25.112	UU	0.082	298366838	25.033	25.187
114	25.299	UU	0.091	167863365	25.187	25.369
115	25.420	UU	0.129	113093677	25.369	25.520
116	25.729	UU	0.093	172520035	25.603	25.778
117	25.800	UU	0.082	84867547	25.778	25.872
118	25.937	UU	0.075	66009990	25.872	25.955
119	26.058	UU	0.075	423444890	25.955	26.132
120	26.202	UU	0.145	296876057	26.132	26.461
121	26.550	UU	0.088	114136007	26.461	26.601
122	26.740	UU	0.138	227150724	26.601	26.841

124	27.024	UU	0.109	206774146	26.939	27.143
125	27.165	UU	0.070	55013315	27.143	27.215
126	27.310	UU	0.067	269109305	27.215	27.339
127	27.351	UU	0.034	105581942	27.339	27.383
128	27.402	UU	0.106	190053038	27.383	27.593
129	27.666	UU	0.088	88609094	27.593	27.711
130	27.734	UU	0.062	46297566	27.711	27.774
131	27.831	UU	0.097	127879177	27.774	27.929
132	27.975	UU	0.065	45736499	27.929	27.995
133	28.015	UU	0.142	100410399	27.995	28.144
134	28.206	UU	0.103	105378805	28.144	28.296
135	28.373	UU	0.076	50878685	28.344	28.426
136	28.534	UU	0.117	135443079	28.426	28.608
137	28.631	UU	0.061	36793376	28.608	28.670
138	28.708	UU	0.182	150627254	28.670	28.933
139	28.976	UU	0.135	99835696	28.933	29.118
140	29.205	UU	0.110	91929496	29.118	29.275
141	29.316	UU	0.127	117417882	29.275	29.489
142	29.566	UU	0.077	232361173	29.489	29.732
143	29.754	UU	0.047	18611304	29.732	29.781
144	29.848	UU	0.123	52414911	29.781	29.916
145	30.053	UU	0.162	155189083	29.916	30.281
146	30.336	UU	0.079	117472613	30.281	30.514
147	30.544	UU	0.042	11879119	30.514	30.558
148	30.651	UU	0.062	71873709	30.558	30.692
149	30.767	UU	0.134	91195621	30.692	30.974
150	31.008	UU	0.090	23198176	30.974	31.089
151	31.141	UU	0.170	51155474	31.089	31.348
152	31 437	UU	0.126	34021052	31.348	31.546
153	31.619	UU	0.051	51154509	31.546	31.643
154	31.660	UU	0.058	49206223	31.643	31.843
155	32.144	UU	0.164	43960564	32.023	32.306
156	32.366	UU	0.081	12791499	32.306	32.413
157	32.619	UU	0.093	71628456	32.483	32.710
158	32.757	UU	0.066	17796077	32.710	32.800
159	32.825	UU	0.073	13934849	32.800	32.889
160	32.937	UU	0.096	19102567	32.889	33.033
161	33.122	UU	0.105	16191651	33.033	33.185
162	33.445	UU	0.077	12989442	33.385	33.523
163	33.596	UU	0.075	21511164	33.523	33.711
164	33.829	UU	0.088	6605550	33.776	33.894
165	33.936	UU	0.087	6523961	33.894	34.028
166	34.163	UU	0.081	6980079	34.095	34.213
167	34.274	UU	0 159	14881512	34.213	34 536
168	34.667	UU	0.070	33933919	34.536	34.786
169	34.832	UU	0.065	4718963	34.786	34.904
170	34.970	UU	0.093	8026937	34.904	35.084
171	35.807	UU	0.078	5266748	35.717	35.874
172	35.929	UU	0.068	4539635	35.874	36.007
173	36.139	UU	0.080	2545413	36.080	36.231
174	36.304	UU	0.088	2889834	36.231	36.391
175	36.764	UU	0.098	4509286	36.657	36.950
176	37.404	UU	0.083	2275824	37.326	37.520

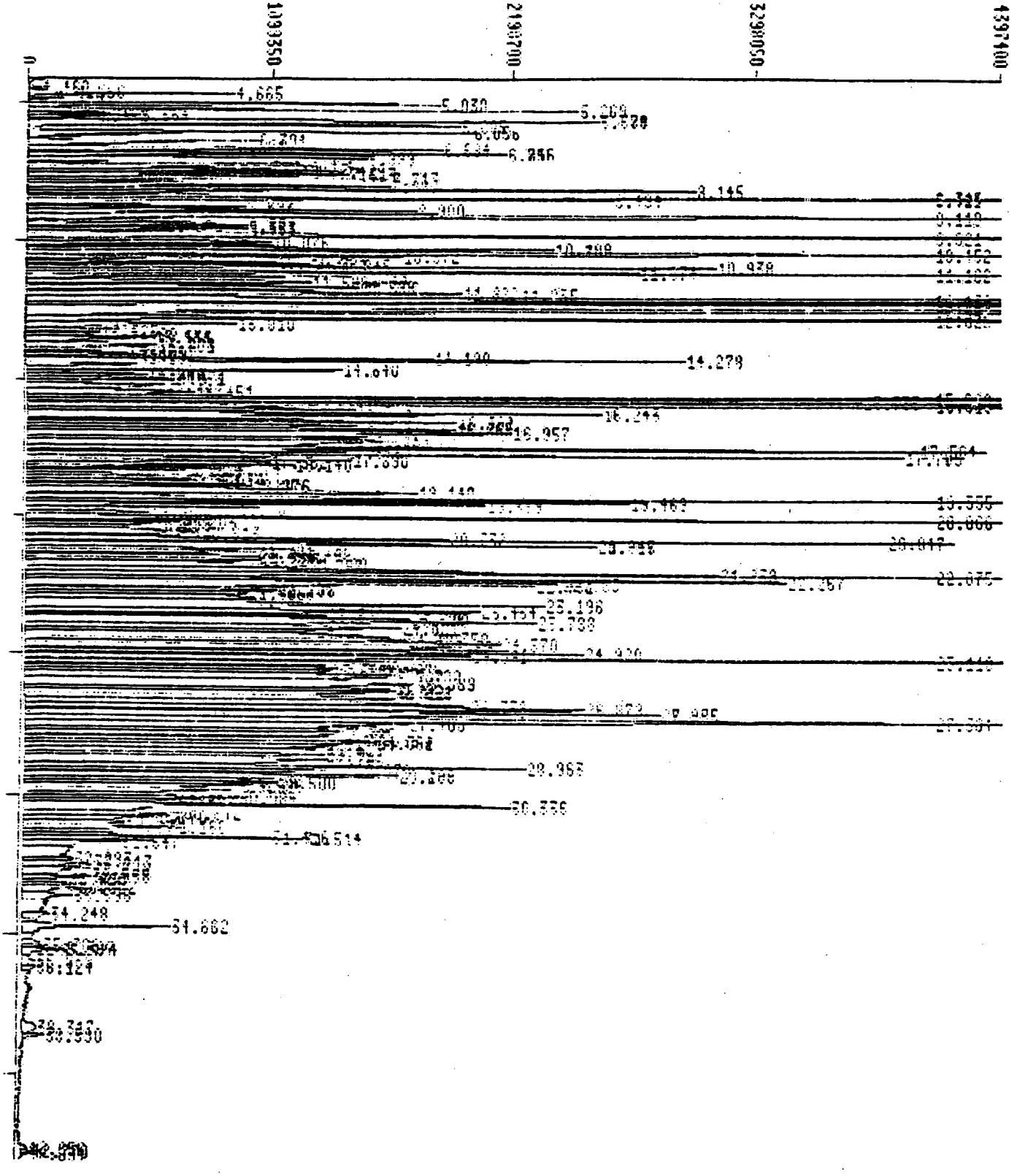
Data file: DATA:B009C11A.D
File type: GC / MS DATA FILE

Name Info: WASTEX LIQ. 871123.013 DF=20 + 40 PPM ISS, 100 PPM SUR
Misc Info:
Operator : T. SABATINO

Date : 30 Nov 87 1:24 pm
Instrment: MS_5970
Inlet : GC

Sequence index : 3
Als bottle num : 11
Replicate num : 1

TIC of DATA:B009C11A.D



d of plot. Time = 4.13 to 43.02 minutes Chart speed = 0.51 cm/min

TIC of DATA:B009C11A.D
WASTEX LIQ. 871123.013 DF=20 + 40 PPM ISS, 100 PPM SUR

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	4.460	BV	0.054	1784288	4.313	4.498
2	4.556	VV	0.053	2620405	4.498	4.606
3	4.665	VV	0.042	22692072	4.606	4.775
4	4.830	VV	0.054	3952668	4.775	4.918
5	5.038	PV	0.062	79125917	4.975	5.180
6	5.269	VV	0.044	63769036	5.180	5.324
7	5.364	VV	0.052	11581476	5.324	5.416
8	5.452	VV	0.066	17490064	5.416	5.553
9	5.584	VV	0.034	5704507	5.553	5.598
10	5.670	VV	0.060	101564022	5.598	5.732
11	5.805	VV	0.053	68354544	5.732	5.919
12	6.056	VV	0.070	77905662	5.919	6.264
13	6.394	VV	0.100	55355036	6.264	6.526
14	6.551	VV	0.034	7505886	6.526	6.575
15	6.684	VV	0.062	72684809	6.575	6.714
16	6.756	VV	0.063	28821152	6.714	6.787
17	6.845	VV	0.065	74936564	6.787	6.922
18	6.999	VV	0.070	65574847	6.922	7.101
19	7.143	VV	0.057	13279136	7.101	7.183
20	7.247	VV	0.050	40734362	7.183	7.291
21	7.319	VV	0.074	37947647	7.291	7.382
22	7.429	VV	0.065	53540177	7.382	7.474
23	7.513	VV	0.137	95969914	7.474	7.649
24	7.713	VV	0.069	74763716	7.649	7.788
25	7.834	VV	0.058	22902819	7.788	7.882
26	7.990	VV	0.086	75860352	7.882	8.029
27	8.145	VV	0.075	158224887	8.029	8.188
28	8.217	VV	0.061	37881102	8.188	8.270
29	8.315	VV	0.066	30972393	8.270	8.349
30	8.421	VV	0.046	198256072	8.349	8.459
31	8.494	VV	0.063	99576644	8.459	8.648
32	8.697	VV	0.067	21932375	8.648	8.747
33	8.793	VV	0.070	44972101	8.747	8.852
34	8.900	VV	0.069	68860389	8.852	8.987
35	9.118	VV	0.094	289365508	8.987	9.206
36	9.246	VV	0.056	22913453	9.206	9.298
37	9.371	VV	0.082	44776371	9.298	9.435
38	9.471	VV	0.056	34677931	9.435	9.510
39	9.553	VV	0.059	35089312	9.510	9.597
40	9.624	VV	0.066	31529912	9.597	9.694
41	9.821	VV	0.070	266786928	9.694	9.901
42	9.941	VV	0.047	14242163	9.901	9.983
43	10.076	VV	0.079	60279891	9.983	10.146
44	10.198	VV	0.052	38238229	10.146	10.233
45	10.288	VV	0.062	98097570	10.233	10.354
46	10.452	VV	0.066	216934421	10.354	10.499
47	10.572	VV	0.051	46790570	10.499	10.614
48	10.634	VV	0.045	14572916	10.614	10.675
49	10.727	VV	0.054	13427256	10.675	10.748
50	10.781	VV	0.050	32356867	10.748	10.819
51	10.845	VV	0.043	31384516	10.919	10.887
52	10.938	VV	0.050	88876935	10.887	11.024
53	11.074	VV	0.042	12182876	11.024	11.093
54	11.162	VV	0.049	135804725	11.093	11.215
55	11.299	VV	0.058	50559573	11.215	11.388
56	11.508	VV	0.090	82629407	11.388	11.553

58	11.706	UU	0.121	108590676	11.639	11.781
59	11.822	UU	0.065	50448991	11.781	11.850
60	11.935	UU	0.090	122601165	11.850	12.001
61	12.136	UU	0.091	513379579	12.001	12.213
62	12.257	UU	0.063	200938531	12.213	12.356
63	12.507	UU	0.107	431375110	12.356	12.725
64	12.825	UU	0.073	267787286	12.725	12.950
65	13.010	UU	0.109	58309086	12.950	13.171
66	13.233	UU	0.095	22301173	13.171	13.303
67	13.325	UU	0.052	9829335	13.303	13.362
68	13.433	UU	0.085	16424283	13.362	13.465
69	13.511	UU	0.095	36726965	13.465	13.649
70	13.708	UU	0.054	14803000	13.649	13.734
71	13.801	UU	0.092	34385197	13.734	13.877
72	13.916	UU	0.064	12181846	13.877	13.957
73	13.986	UU	0.042	8025585	13.957	14.008
74	14.031	UU	0.037	6853013	14.008	14.050
75	14.097	UU	0.069	23839050	14.050	14.168
76	14.190	UU	0.037	5443369	14.168	14.207
77	14.278	UU	0.073	155101104	14.207	14.422
78	14.467	UU	0.072	25236375	14.422	14.559
79	14.640	UU	0.055	46556789	14.559	14.696
80	14.786	UU	0.055	17039024	14.696	14.802
81	14.840	UU	0.076	23922509	14.802	14.893
82	14.971	UU	0.074	32828511	14.893	15.016
83	15.052	UU	0.110	19432575	15.016	15.133
84	15.189	UU	0.138	57520684	15.133	15.337
85	15.451	UU	0.129	75751511	15.337	15.563
86	15.660	UU	0.060	244733278	15.563	15.699
87	15.733	UU	0.053	95587766	15.699	15.772
88	15.830	UU	0.050	159144739	15.772	15.855
89	15.916	UU	0.077	343356218	15.855	16.041
90	16.109	UU	0.091	97085922	16.041	16.193
91	16.243	UU	0.111	190323271	16.193	16.445
92	16.494	UU	0.059	49283089	16.445	16.517
93	16.562	UU	0.054	63363736	16.517	16.588
94	16.622	UU	0.076	73614380	16.588	16.675
95	16.722	UU	0.083	84710000	16.675	16.790
96	16.865	UU	0.079	108920580	16.790	16.906
97	16.957	UU	0.126	211606343	16.906	17.117
98	17.154	UU	0.066	73755920	17.117	17.205
99	17.272	UU	0.154	189889000	17.205	17.436
100	17.564	UU	0.069	210397321	17.436	17.596
101	17.633	UU	0.072	72592374	17.596	17.687
102	17.705	UU	0.035	19060441	17.687	17.725
103	17.775	UU	0.059	135988072	17.725	17.865
104	17.890	UU	0.050	31147655	17.865	17.930
105	17.962	UU	0.077	64527433	17.930	18.071
106	18.140	UU	0.073	50113276	18.071	18.202
107	18.274	UU	0.065	37614476	18.202	18.304
108	18.324	UU	0.054	22363161	18.304	18.367
109	18.392	UU	0.073	27355907	18.367	18.466
110	18.526	UU	0.078	36055972	18.466	18.591
111	18.641	UU	0.056	28587423	18.591	18.674
112	18.711	UU	0.084	33863354	18.674	18.783
113	18.805	UU	0.039	10176025	18.783	18.824
114	18.876	UU	0.072	40567520	18.824	18.929
115	19.140	UU	0.124	167341557	18.929	19.188
116	19.213	UU	0.069	25979434	19.188	19.260
117	19.355	UU	0.066	163787163	19.260	19.420
118	19.469	UU	0.050	73245259	19.420	19.500
119	19.539	UU	0.076	79007305	19.500	19.654
120	19.704	UU	0.082	48019101	19.654	19.822
121	19.906	UU	0.105	33845299	19.822	19.960

124	20.299	UU	0.103	34467203	20.254	20.368
125	20.390	UU	0.060	17182920	20.368	20.433
126	20.462	UU	0.042	11669409	20.433	20.477
127	20.613	UU	0.125	74154133	20.477	20.683
128	20.732	UU	0.063	28824304	20.683	20.762
129	20.847	UU	0.058	135192631	20.762	20.899
130	20.945	UU	0.058	59142455	20.899	20.977
131	21.017	UU	0.064	107288286	20.977	21.091
132	21.125	UU	0.057	24894645	21.091	21.148
133	21.196	UU	0.066	49322930	21.148	21.243
134	21.291	UU	0.075	45903822	21.243	21.339
135	21.387	UU	0.074	38588765	21.339	21.422
136	21.460	UU	0.069	47826705	21.422	21.511
137	21.580	UU	0.088	65049543	21.511	21.637
138	21.689	UU	0.072	42919781	21.637	21.723
139	21.763	UU	0.093	86105534	21.723	21.851
140	21.939	UU	0.079	118322797	21.851	21.991
141	22.075	UU	0.073	236884774	21.991	22.184
142	22.267	UU	0.072	136547185	22.184	22.320
143	22.363	UU	0.050	69512206	22.320	22.391
144	22.431	UU	0.094	147721989	22.391	22.565
145	22.594	UU	0.076	53359682	22.565	22.655
146	22.708	UU	0.077	60343104	22.655	22.757
147	22.809	UU	0.100	66984972	22.757	22.875
148	22.988	UU	0.154	93844364	22.875	23.042
149	23.196	UU	0.122	215384112	23.042	23.333
150	23.434	UU	0.118	138435130	23.333	23.505
151	23.549	UU	0.064	48460484	23.505	23.571
152	23.605	UU	0.066	59515027	23.571	23.649
153	23.698	UU	0.067	76543497	23.649	23.739
154	23.788	UU	0.114	170419281	23.739	23.930
155	24.021	UU	0.114	139436286	23.930	24.098
156	24.122	UU	0.097	74865915	24.098	24.198
157	24.358	UU	0.160	154296916	24.198	24.381
158	24.426	UU	0.102	132279646	24.381	24.516
159	24.570	UU	0.121	154572496	24.516	24.654
160	24.692	UU	0.094	126797076	24.654	24.771
161	24.805	UU	0.069	87356815	24.771	24.854
162	24.920	UU	0.065	121499131	24.854	24.962
163	24.991	UU	0.060	68898692	24.962	25.029
164	25.110	UU	0.082	321615497	25.029	25.193
165	25.230	UU	0.058	55279214	25.193	25.254
166	25.294	UU	0.073	79083604	25.254	25.345
167	25.474	UU	0.091	90819207	25.435	25.548
168	25.585	UU	0.081	77475873	25.548	25.647
169	25.722	UU	0.083	97947890	25.647	25.757
170	25.797	UU	0.103	98603753	25.757	25.870
171	25.989	UU	0.171	225046915	25.870	26.124
172	26.221	UU	0.111	125352411	26.124	26.266
173	26.312	UU	0.140	136030772	26.266	26.427
174	26.539	UU	0.111	135957609	26.427	26.581
175	26.739	UU	0.135	176614031	26.581	26.765
176	26.878	UU	0.106	193892076	26.765	26.926
177	26.955	UU	0.061	74326721	26.926	26.994
178	27.026	UU	0.062	104116997	26.994	27.073
179	27.103	UU	0.086	125286157	27.073	27.191
180	27.304	UU	0.078	305356480	27.191	27.363
181	27.400	UU	0.179	181468476	27.363	27.570
182	27.621	UU	0.100	82059150	27.570	27.674
183	27.718	UU	0.075	73352660	27.674	27.765
184	27.811	UU	0.077	73728839	27.765	27.858
185	27.899	UU	0.063	50637108	27.858	27.922
186	28.002	UU	0.089	96725441	27.922	28.035
187	28.064	UU	0.117	108862822	28.035	28.162
188	28.201	UU	0.111	92318831	28.162	28.280

190	28.519	UU	0.097	94495058	28.470	28.607
191	28.701	UU	0.163	161439539	28.607	28.847
192	28.963	UU	0.104	142595886	28.847	29.030
193	29.079	UU	0.084	86729921	29.030	29.152
194	29.190	UU	0.059	40342394	29.152	29.213
195	29.266	UU	0.127	118071690	29.213	29.368
196	29.500	UU	0.078	68308218	29.452	29.568
197	29.596	UU	0.146	89227196	29.568	29.750
198	29.808	UU	0.099	65717402	29.750	29.900
199	29.966	UU	0.105	49130422	29.900	30.031
200	30.084	UU	0.081	55157913	30.031	30.155
201	30.169	UU	0.099	38450452	30.155	30.262
202	30.336	UU	0.116	144610794	30.262	30.579
203	30.642	UU	0.103	51962765	30.579	30.730
204	30.770	UU	0.167	56421964	30.730	30.931
205	30.991	UU	0.123	39536506	30.931	31.094
206	31.160	UU	0.099	45048992	31.094	31.256
207	31.319	UU	0.081	23253852	31.256	31.355
208	31.416	UU	0.087	24348332	31.355	31.459
209	31.514	UU	0.069	59905074	31.459	31.615
210	31.647	UU	0.123	44181517	31.615	31.862
211	32.283	UU	0.113	17894101	32.230	32.378
212	32.443	UU	0.122	25308555	32.378	32.588
213	32.626	UU	0.145	32468432	32.588	32.891
214	32.938	UU	0.095	17076531	32.891	33.041
215	33.098	UU	0.081	10644633	33.041	33.142
216	33.165	UU	0.106	12353284	33.142	33.255
217	33.302	UU	0.138	20340837	33.255	33.465
218	33.596	UU	0.159	24500696	33.465	33.779
219	34.248	UU	0.141	13235239	34.179	34.443
220	34.662	UU	0.081	36699974	34.555	34.949
221	35.306	UU	0.145	6969939	35.148	35.339
222	35.397	UU	0.090	4690409	35.339	35.445
223	35.524	UU	0.095	11440785	35.445	35.700
224	35.939	UU	0.148	6085648	35.784	36.076
225	36.124	UU	0.102	4334392	36.076	36.260
226	38.317	UU	0.266	11834823	38.039	38.516
227	38.590	UU	0.097	6195222	38.516	38.851
228	42.656	UU	0.091	1893515	42.534	42.690
229	42.770	UU	0.080	2012692	42.690	42.799
230	42.834	UU	0.074	1812530	42.799	42.931

SECTION 4.0
DECAFLUOROTRIPHENYL PHOSPHENE TUNING SPECTRA AND TUNING FORMS

WASTEX INDUSTRIES, INC.
28 South Hanover St.
Pottstown, PA 19464

CHAIN OF CUSTODY RECORD

CLIENT: U.S. EPA Region II
SITE LOCATION: Newark NJ
SAMPLERS: JC/BD

SAMPLE ID	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	No. of Containers	GC/MS Volatile	GC/MS Base + Acid						REMARKS/ANALYSES
71123.011	11/18	9:00	S	X	X		1	+	+						Two week turnaround
.017	11/17	13:00	L	X	X		1	+	+						
.018	11/18	10:30	S	X			1	+	+						
TOTALS															

SAMPLE CONTAINERS PREPARED BY:

RELINQUISHED AT LABORATORY BY: Michelle D Dunier

DATE/TIME: 11/24 4:00

RECIEVED BY: [illegible]

RELINQUISHED BY:

DATE/TIME

RECIEVED BY:

RELINQUISHED BY:

DATE/TIME

RECIEVED BY:

RELINQUISHED BY:

DATE/TIME

RECIEVED FOR LABORATORY BY:

DATE/TIME

REMARKS

WASTEX INDUSTRIES, INC.
28 South Hanover St.
Pottstown, PA 19464

87-889
87-890

CHAIN OF CUSTODY RECORD

CLIENT: U.S. EPA Region II
SITE LOCATION: Newark NJ
SAMPLERS: JC/BD

SAMPLE ID	DATE	TIME	MATRIX	COMP	GRAB	SAMPLE LOCATION	No. of Containers	GC/MS Volatile	GC/MS BASE	GC/MS ACID					REMARKS/ANALYSES
871123.012	11/17	16:00	S	X			1	X	X	X					
013	11/17	8:00	[illegible]	X			1	X	X	X					
															Two week turnaround
TOTALS															

SAMPLE CONTAINERS PREPARED BY:	RELINQUISHED AT LABORATORY BY:	DATE/TIME	RECIEVED BY:
	Michelle D Diener	11/25 11:00	10:45 AM Tim Black 11/30/87

RELINQUISHED BY:	DATE/TIME	RECIEVED BY:	RELINQUISHED BY:	DATE/TIME	RECIEVED BY:

RELINQUISHED BY:	DATE/TIME	RECIEVED FOR LABORATORY BY:	DATE/TIME	REMARKS