

## Lampiran 1. Perhitungan

### 1.1 Pembuatan Larutan HCl 6N

Diketahui:  $\rho_{HCl} = 1,19 \text{ g/mL}$

$\% \text{ b/b} = 37 \%$

$BM_{HCl} = 36,46 \text{ g/mol}$

$\eta_{HCl} = 1$

Normalitas HCl 37 % (N)

$$N = \%(b/b) \times \frac{\rho}{BM} \times \eta_{eq}$$

$$N = \frac{37}{100} \times \frac{1,19 \text{ g/mL}}{36,46 \text{ g/mol}} \times 1$$

$$N = 12,08 \text{ N}$$

$$V_x = \frac{N_x V}{N_x}$$

$V_x$  = Volume HCl 37 % yang diperlukan

$N_x$  = Normalitas HCl 37 %

$N$  = Normalitas larutan HCl yang diinginkan

$V$  = Volume HCl yang diinginkan

$$V_x = \frac{6 \text{ N} \times 1000 \text{ mL}}{12,08 \text{ N}}$$

$$V_x = 496,69 \text{ mL}$$

### 1.2 Pembuatan Larutan $\text{NH}_4\text{Cl}$ 0,1 M

Diketahui: BM  $\text{NH}_4\text{Cl}$  = 53,5

$$\eta_{\text{eq}} = 1$$

$$N = \frac{m/\text{BM}}{V} \times \eta_{\text{eq}}$$

$$m = \text{BM} \times V \times N \times \eta_{\text{eq}}$$

m = Berat  $\text{NH}_4\text{Cl}$  yang diperlukan

N = Volume  $\text{NH}_4\text{Cl}$  yang diinginkan

V = Volume  $\text{NH}_4\text{Cl}$  yang diinginkan

$$m = 53,5 \text{ g/mol} \times 1 \text{ L} \times 0,1 \text{ N} \times 1$$

$$m = 5,35 \text{ g}$$

### 1.3 Keasaman Zeolit sebelum aktivasi

$$\text{Keasaman} = \frac{\text{Berat zeolit setelah adsorpsi}}{\text{berat zeolit sebelum adsorpsi} / \text{BM NH}_3}$$

$$= \frac{w_2 - w_1}{w_1 - w_0} / \text{BM NH}_3$$

Diketahui: Berat krus kosong ( $w_0$ ) = 20,1593

Berat krus + zeolit setelah pemanasan ( $w_1$ ) = 20,6306

Berat krus + zeolit setelah adsorpsi ( $w_2$ ) = 20,6575

BM  $\text{NH}_3$  = 17

$$\text{Keasaman} = \frac{20,6575 - 20,6306}{20,6306 - 20,1593} / 17$$

$$= 0,003357 \text{ mol/gram}$$

#### 1.4 Keasaman zeolit alam setelah aktivasi

Diketahui: Berat krus kosong ( $w_0$ ) = 20,1596

Berat krus + zeolit setelah pemanasan ( $w_1$ ) = 20,6181

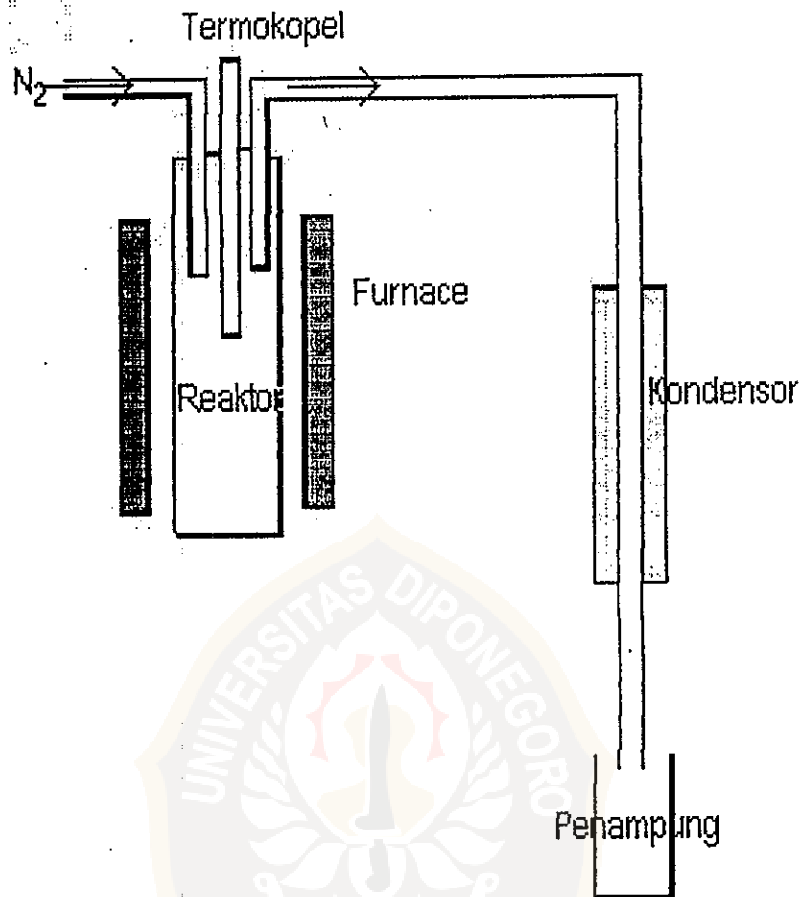
Berat krus + zeolit setelah adsorpsi ( $w_2$ ) = 20,6605

BM  $\text{NH}_3$  = 17

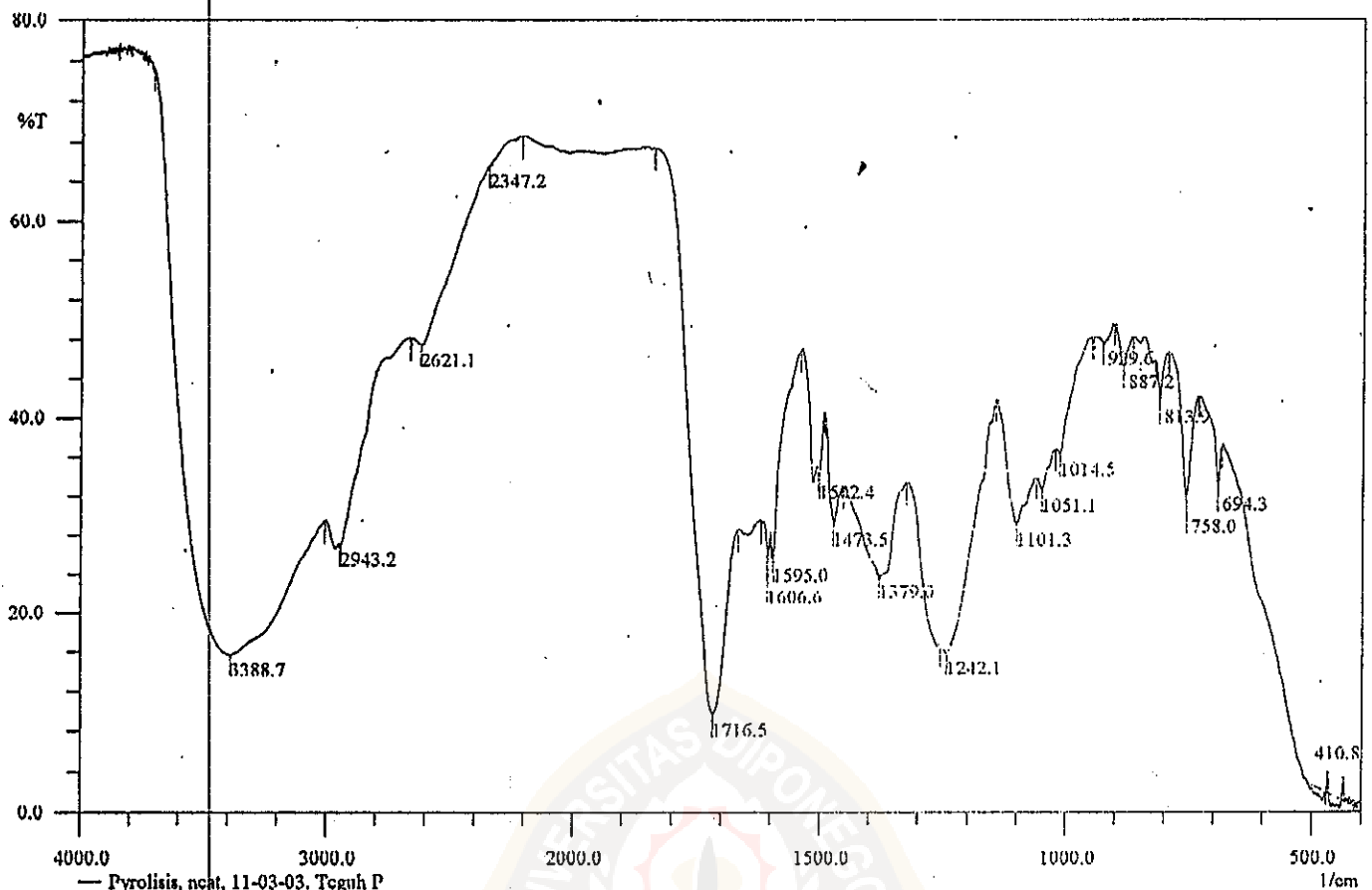
$$\text{Keasaman} = \frac{20,6605 - 20,6181}{20,6181 - 20,1596} \times \frac{1}{17}$$

$$= 0,0054 \text{ mol/gram}$$



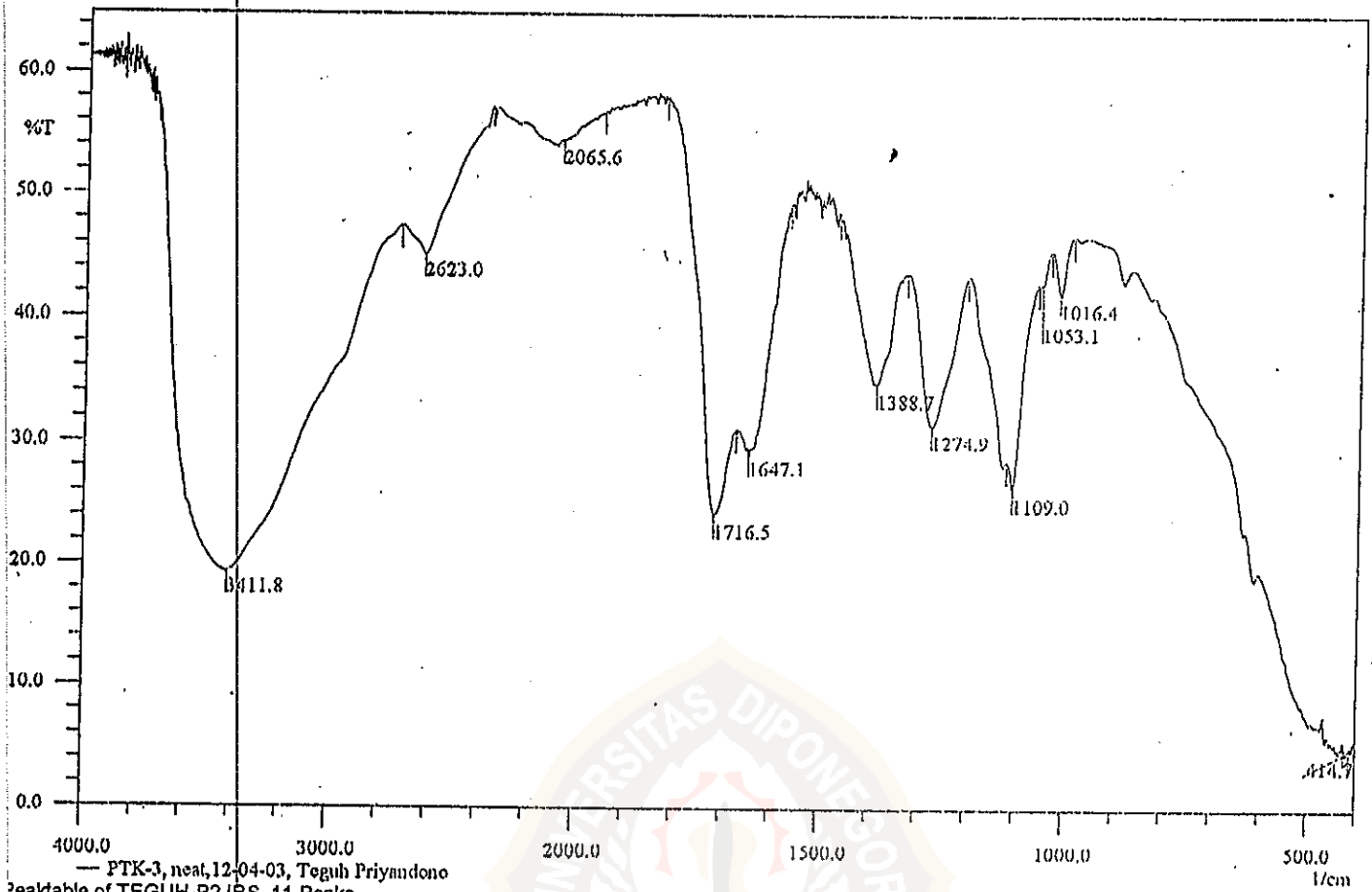
**Lampiran 2. Gambar Set Reaktor**

### Lampiran 3. Spektra FTIR produk cair pirolisis tempurung kelapa



Nr.	Pos. (1/cm)	Inten. (%T)
1	410.8	0.528
2	694.3	32.841
3	758.0	32.072
4	813.9	41.681
5	887.2	45.291
6	929.6	47.657
7	1014.5	36.357
8	1051.1	32.703
9	1101.3	29.199
10	1242.1	15.983
11	1379.0	23.903
12	1473.5	29.248
13	1502.4	34.035
14	1595.0	25.553
15	1606.6	26.155
16	1716.5	9.699
17	2347.2	65.609
18	2621.1	47.478
19	2943.2	27.145
20	3388.7	15.737

**Lampiran 4. Spektra FTIR produk perengkahan katalitik dari produk cair tempurung kelapa**

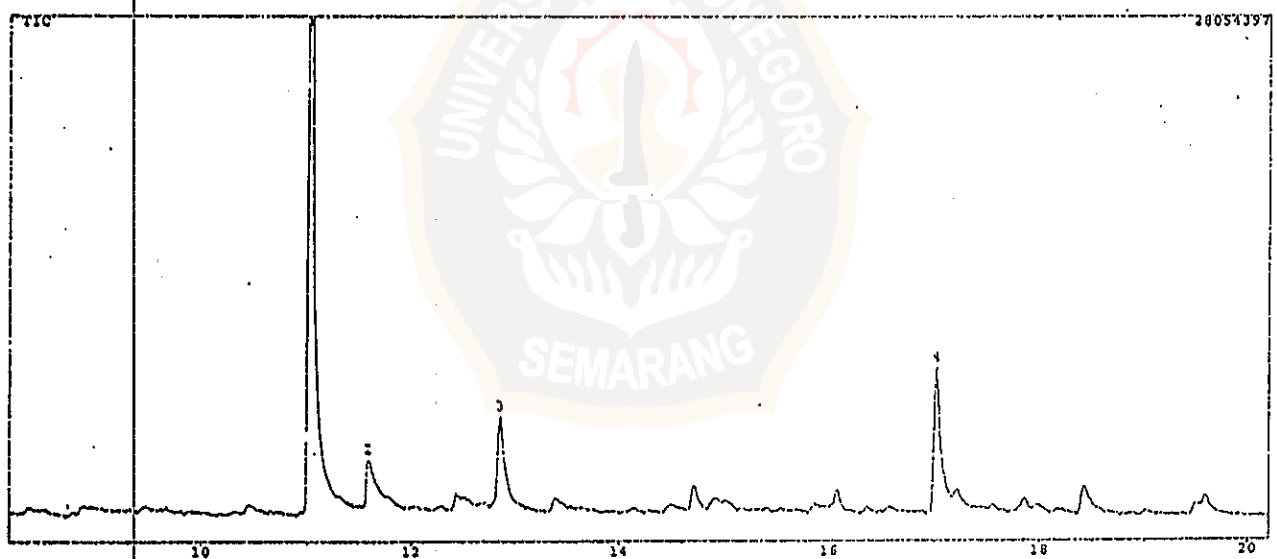
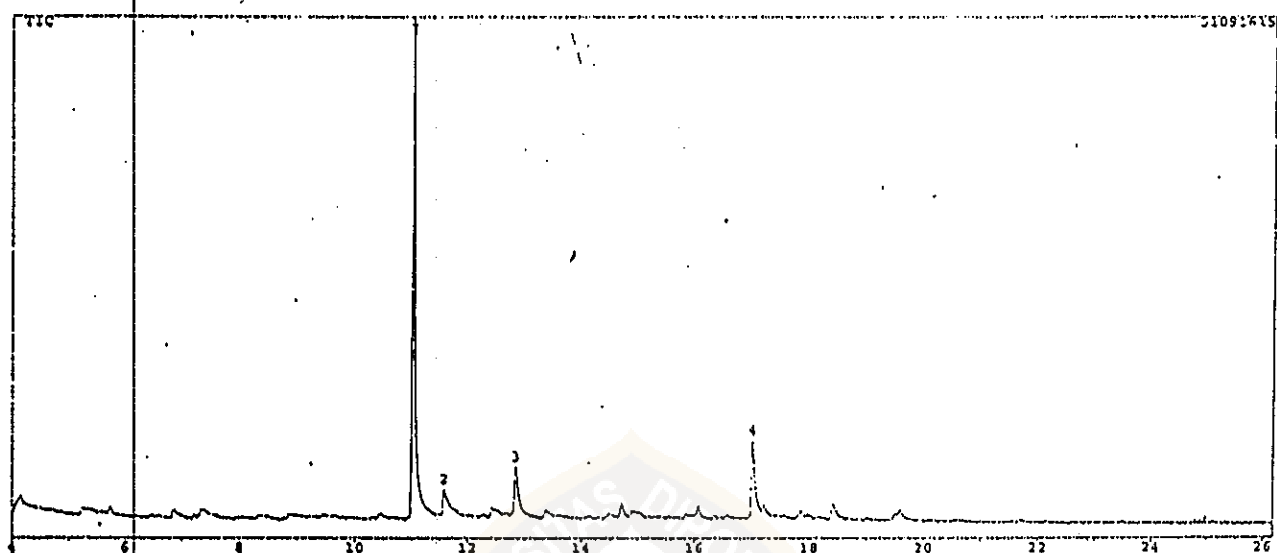


No.	Pos. (1/cm)	Inten. (%T)
1	414.7	4.928
2	1016.4	42.097
3	1053.1	42.828
4	1109.0	26.318
5	1274.9	31.568
6	1388.7	34.804
7	1647.1	29.318
8	1716.5	24.143
9	2065.6	54.407
10	2623.0	45.123
11	3411.8	19.345

## Lampiran 5. Kromatogram produk cair pirolisis tempurung kelapa

Lab Kimia Organik

\*\*\* CLASS-5000 \*\*\* Report No. = 1 Data : TEMPRNG.D02 99/11/01 09:07:44  
Sample : Tempurung, Akhmad  
ID :  
Sample Amount : 1  
Dilution Factor : 1  
Type : Unknown  
Operator : Supaya  
Method File Name : AKHMAD.MET  
Vial No. : 1  
Barcode :



\*\*\* CLASS-5000 \*\*\* Report No. = 1 Data : TEMPRNG.D02 99/11/01 09:37:44  
 Sample : Tempurung, Akhnad  
 ID :  
 Sample Amount : 1  
 Dilution Factor : 1  
 Type : Unknown  
 Operator : Supaya  
 Method File Name : AKHMAD.MET  
 Vial No. : 1  
 Barcode :

\*\*\*\* Peak Report \*\*\*\*

PKNO	R.Time	I.Time - F.Time	Area	Height	A/H(sec)	NK	Total	Name
1	11.018	10.967 - 11.375	164415237	48961457	13.362		71.61	:
2	11.544	11.542 - 11.733	11958337	2305109	5.188		5.20	:
3	12.851	12.775 - 13.008	21885179	4592805	4.765		9.52	:
4	17.010	16.950 - 17.167	31410883	7372247	4.261		13.66	:
Total			229872635				100.00	

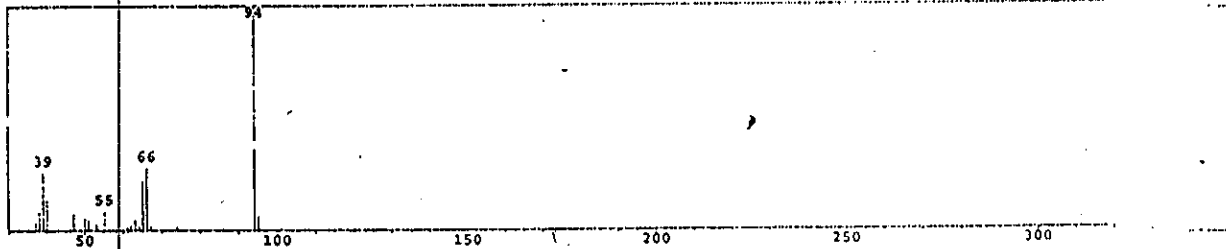




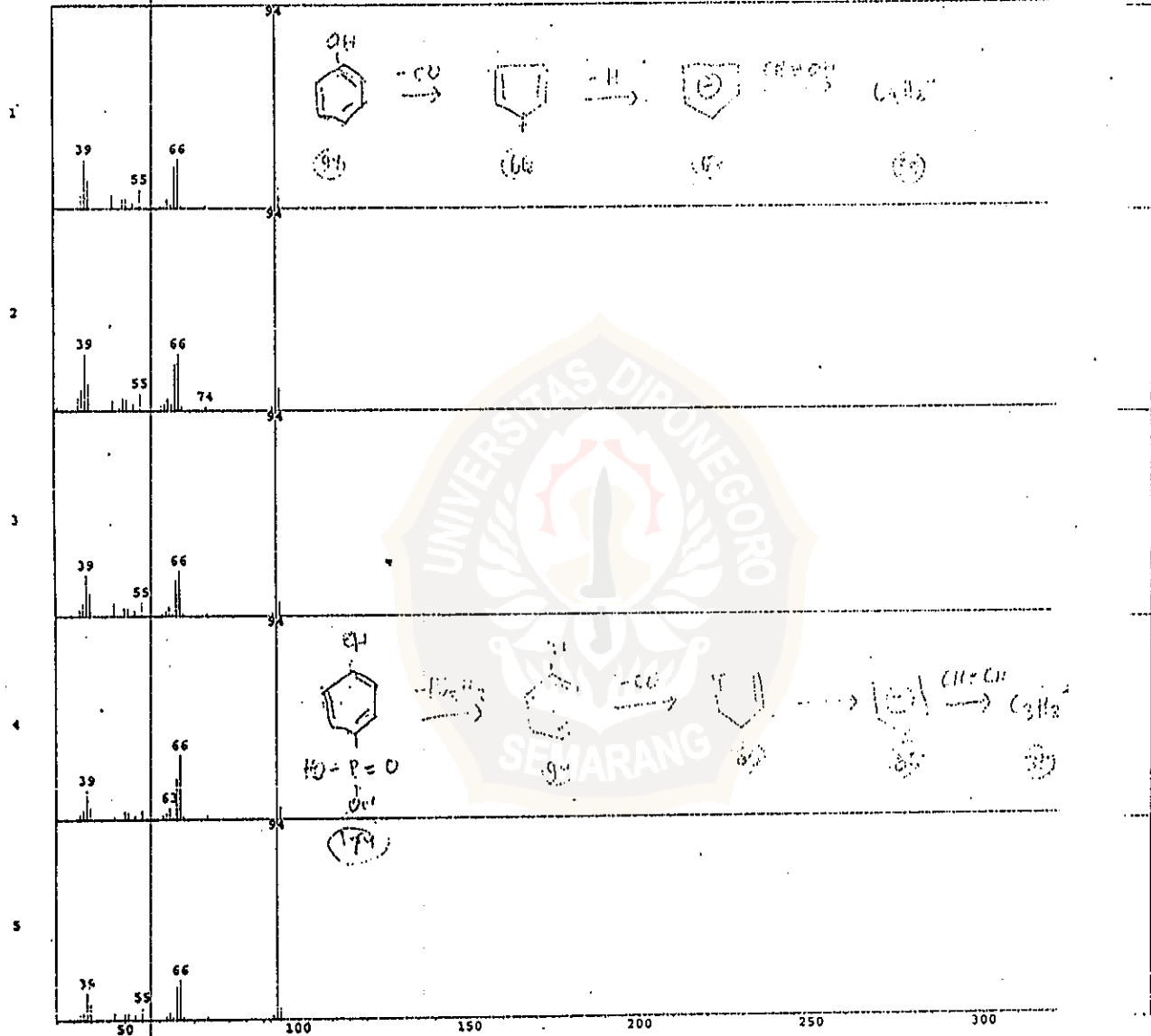
Lampiran 6. Spektra massa produk cair pirolisis tempurung kelapa

<Unknown Spectrum>

Data : TEMPRNG.D02  
 Mass Peak # : 19 Ret. Time : 11.042  
 Scan # : 846 B.G. Scan # : 817  
 Base Peak : 94.30 ( 10793344)



<Hit List>



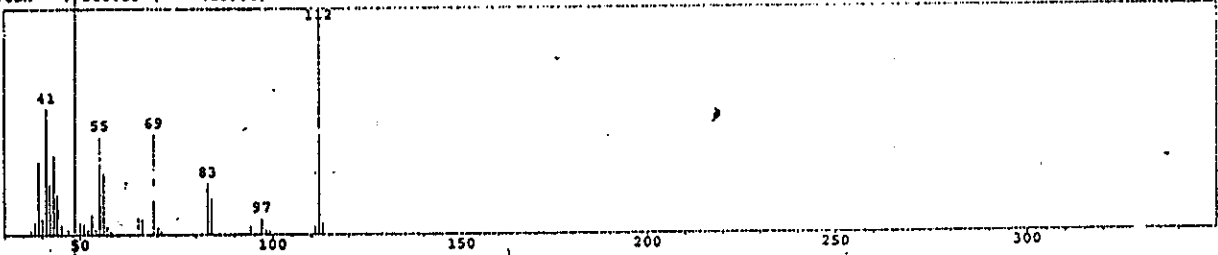
No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	97	94	C6H6O Phenol \$\$ Baker's P and S Liquid and Ointment \$\$ Benzenol \$\$ Carboic acid \$\$ Hydroxy	108-95-2	1010	1
2	95	94	C6H6O Phenol	108-95-2	836	2
3	95	94	C6H6O Phenol	108-95-2	837	2
4	93	174	C6H7O4P Phosphonic acid, (p-hydroxyphenyl)- \$\$ 4-Hydroxybenzenephosphonic acid \$\$ (p-Hydroxyp	33795-18-5	16041	1
5	92	94	C6H6O Phenol	108-95-2	834	2

Library Name  
 (1) NIST62.LIB (2) NIST12.LIB

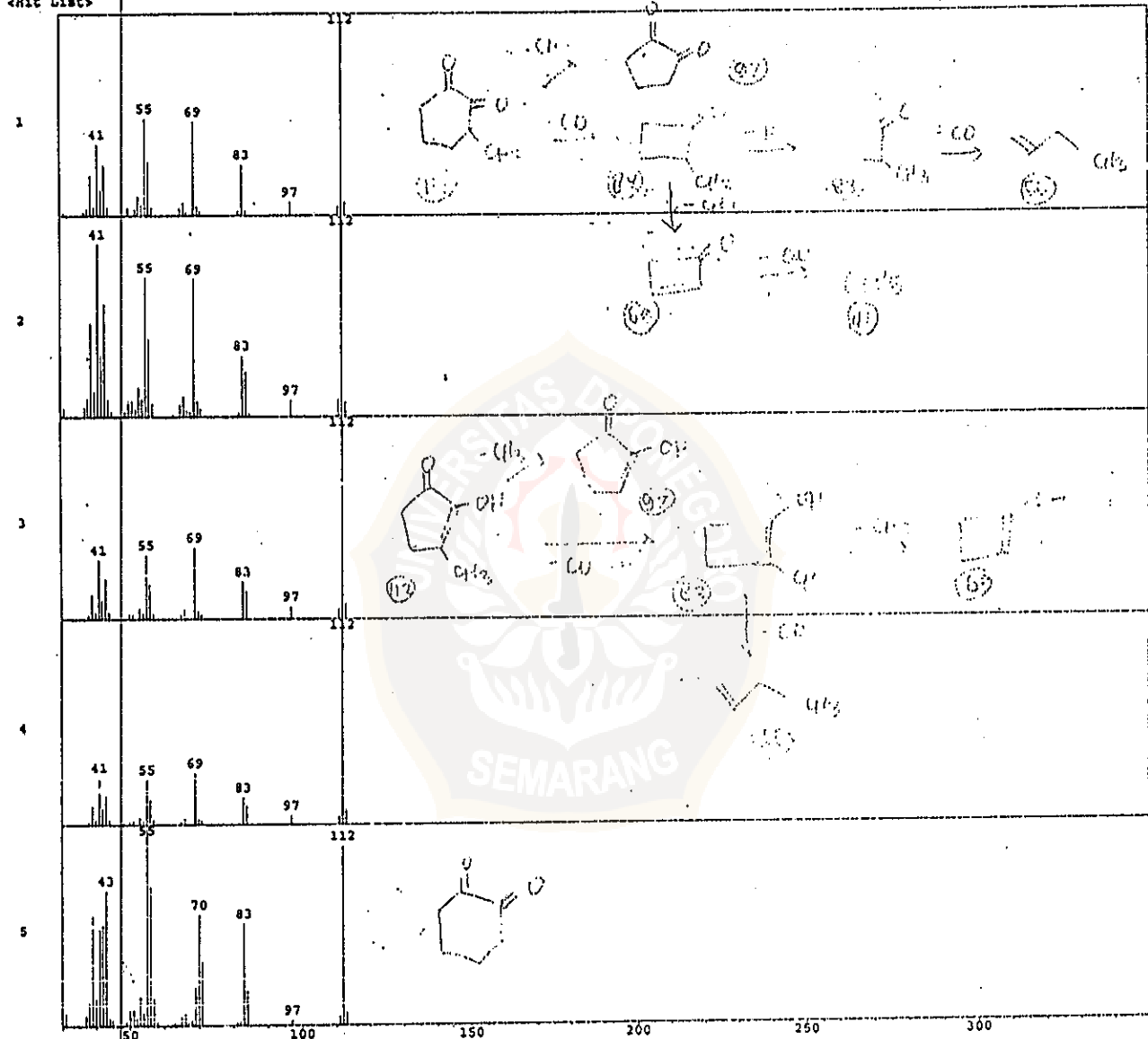
Kimia Organik

<Unknown Spectrum>

Data : TEMPRNG.D02  
 Mass Peak # : 37 Ret. Time : 11.592  
 Scan # : 912 B.G. Scan # : 938  
 Base Peak : 112.15 ( 415932)



<Hit List>

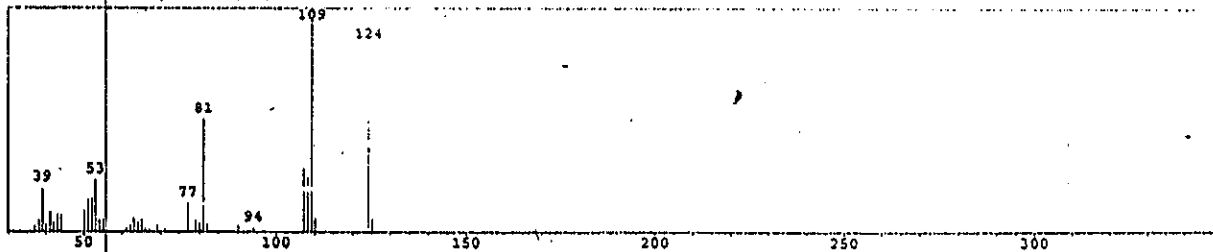


No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	01	112	C6H8O2 1,2-Cyclopentanedione, 3-methyl- \$\$ 3-Methyl-1,2-cyclopentanedione \$\$ 3-Methylcyclo	765-70-8	2500	1
2	89	112	C6H8O2 1,2-Cyclopentanedione, 3-methyl-	765-70-8	1702	2
3	89	112	C6H8O2 2-Cyclopenten-1-one, 2-hydroxy-3-methyl- \$\$ Corylon \$\$ Corylone \$\$ Cyclocten \$\$ Cycloct	80-71-7	2507	1
4	85	112	C6H8O2 2-Cyclopenten-1-one, 2-hydroxy-3-methyl-	80-71-7	1703	2
5	82	112	C6H8O2 1,2-Cyclohexanedione \$\$ 1,2-Dioxocyclohexane \$\$ Cyclohexane-1,2-dione \$\$ 1,2-Cyclohex	765-87-7	2515	1

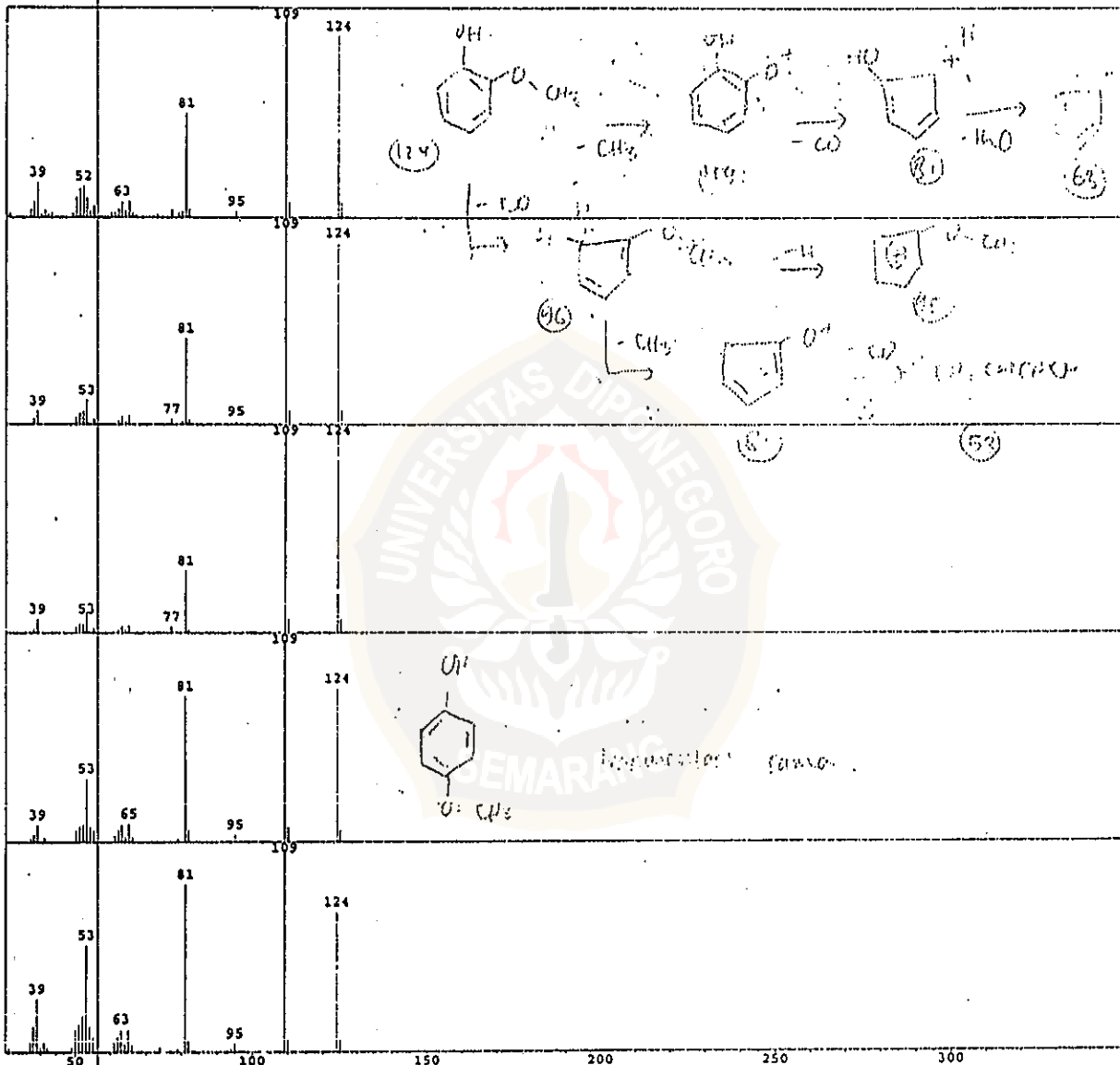
Library Name  
 (1) NIST62.LIB (2) NIST12.LIB

Unknown Spectrum

Data : TEMPRNG.D02  
 Mass Peak # : 36 Ret. Time : 12.058  
 Scan # : 1064 D.G. Scan # : 1003  
 Base Peak : 109.15 ( 883849)



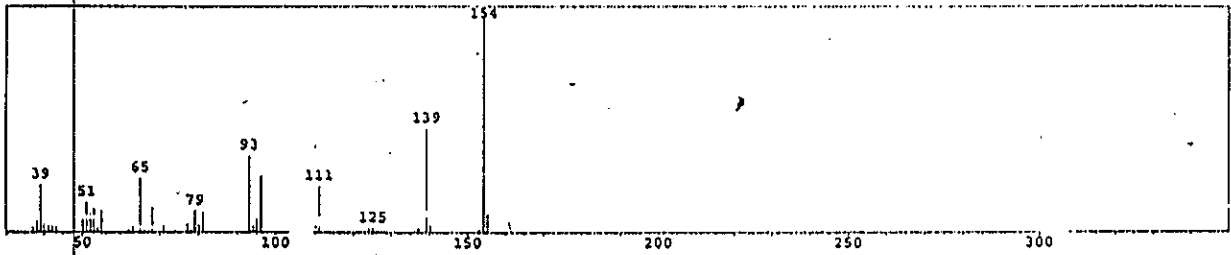
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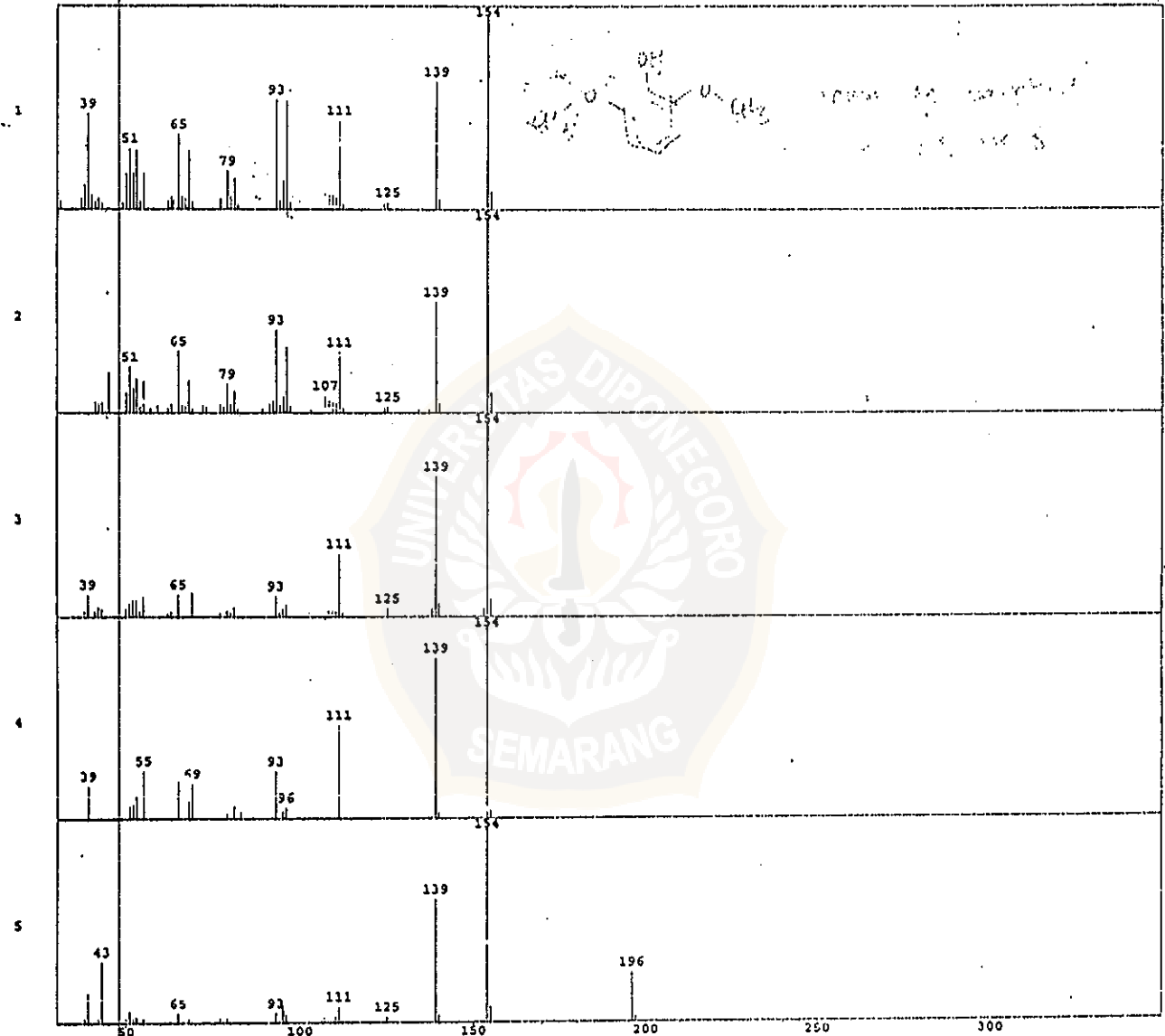
No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LID#
1	87	124	C7H8O2 Phenol, 2-methoxy-	90-05-1	2536	2
2	87	124	C7H8O2 Phenol, 2-methoxy-	90-05-1	2537	2
3	85	124	C7H8O2 Phenol, 2-methoxy-	90-05-1	2538	2
4	84	124	C7H8O2 Mequinol	150-76-5	4138	1
5	84	124	Mequinol	150-76-5	2541	2

Library Name  
 (1) NIST62.LIB (2) NIST12.LIB

<Unknown Spectrum>  
 Data : TEMPRUN.D02  
 Mass Peak # : 42 Ret. Time : 17.017  
 Scan # : 1563 B.G. Scan # : 1594  
 Base Peak : 154.20 ( 1502902)



<Hit List>

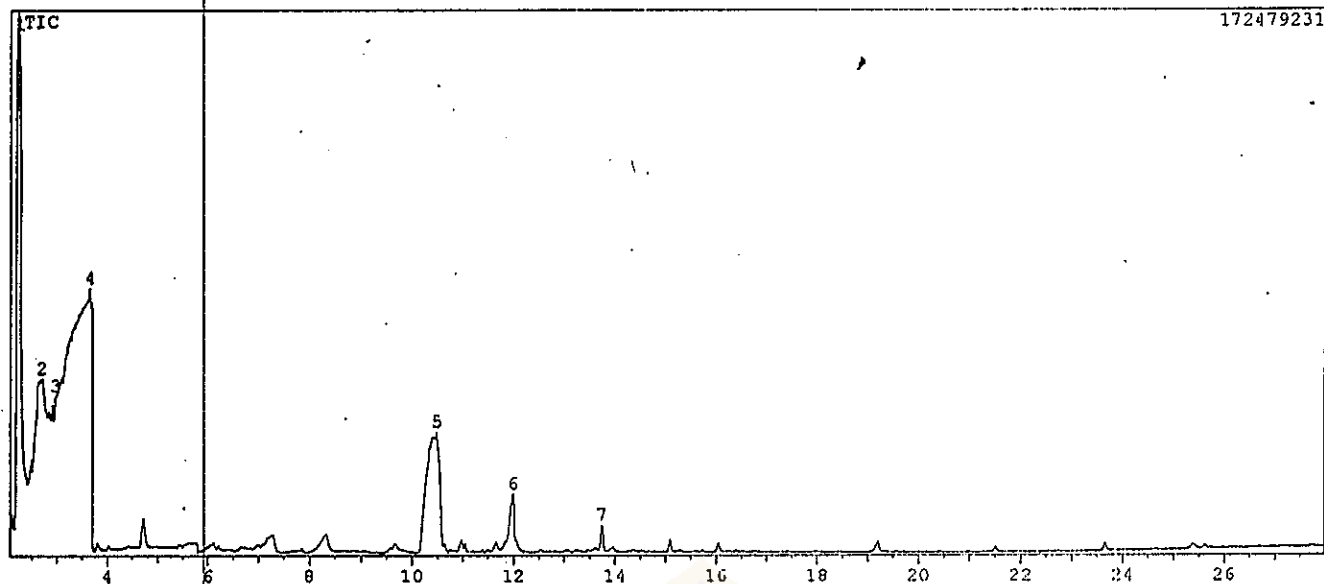


No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LID#
1	86	154	C8H10O3 Phenol, 2,6-dimethoxy- §§ Pyrogallol 1,3-dimethyl ether §§ Syringol §§ 1,3-Dimethoxy-	91-10-1	10719	1
2	85	154	C8H10O3 Phenol, 2,6-dimethoxy-	91-10-1	4620	2
3	84	154	C8H10O3 Phenol, 3,4-dimethoxy- §§ 3,4-Dimethoxyphenol	2033-89-8	10721	1
4	80	154	C8H10O3 Phenol, 3,4-dimethoxy-	2033-89-8	4821	2
5	78	196	C10H12O4 Phenol, 2,3-dimethoxy-, acetate	27257-08-5	21775	1

Library Name  
 (1) NIST62.LIB (2) NIST12.LIB

**Lampiran 7. Kromatogram produk perengkahan katalitik tempurung kelapa****variasi berat katalis**

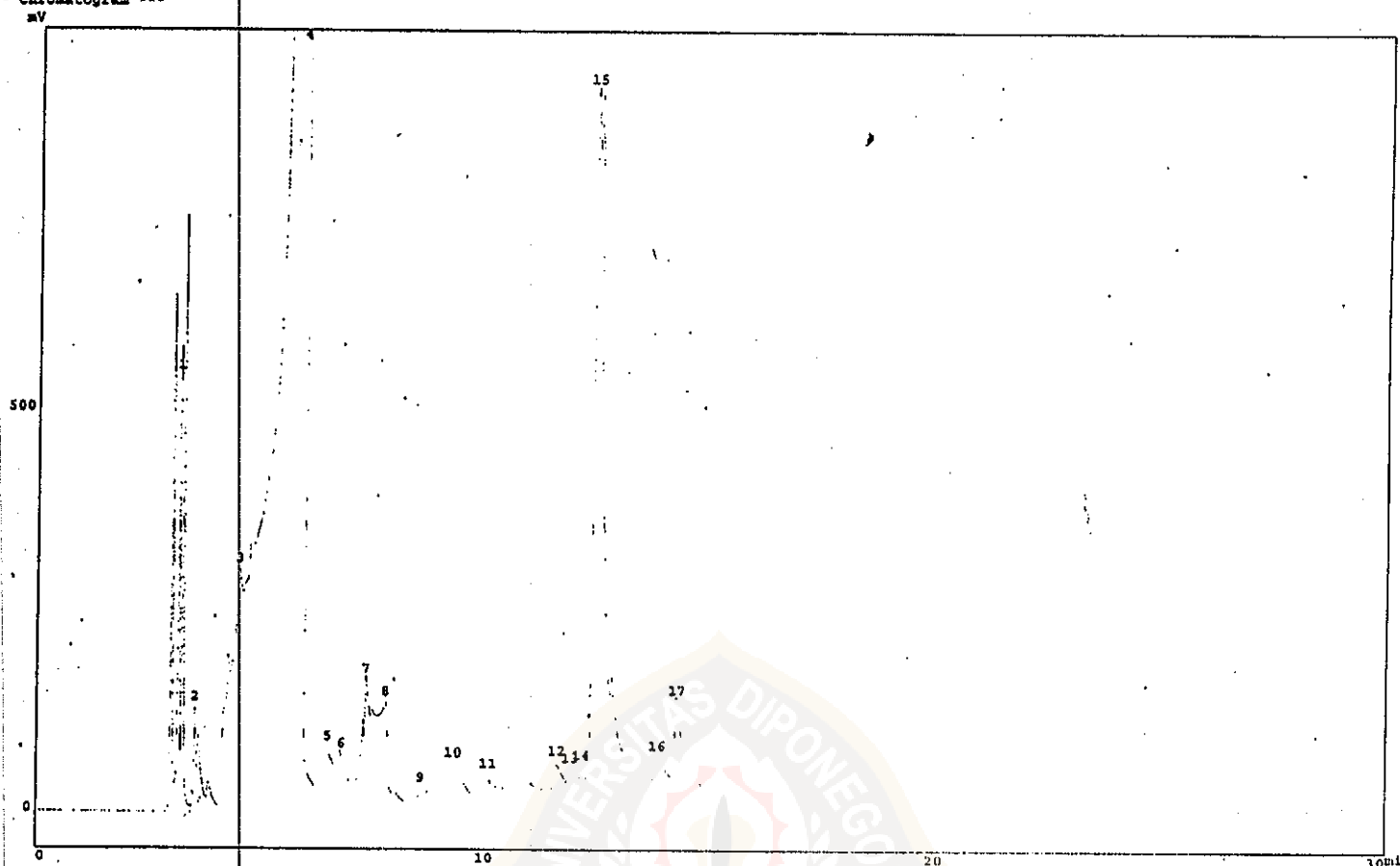
\*\*\* CLASS-5000 \*\*\* Report No. = 1 Data : TEGUH2.D01 03/06/24 12:57:28  
Sample : PIROLISIS TEMPURUNG, TEGUH  
Operator : POY  
Method File Name : TEGUH.MET



LASS-CR10 SYS-1 Chel REPORT.NO-11 DATA=TEGUH1.D01 00/00/00 06:15:20

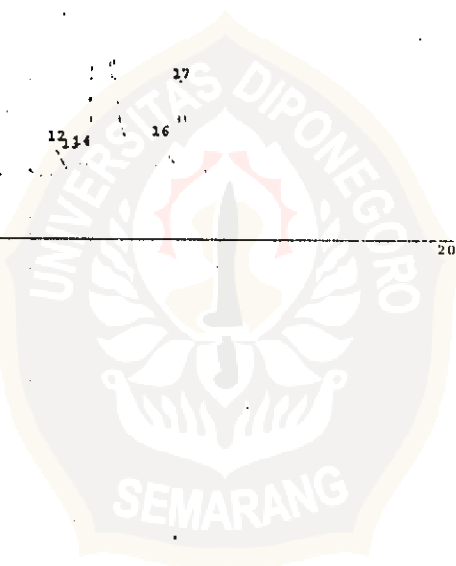
Sample : Teguh P., FK 1  
 Dilution Factor: 1  
 Operator : Maryati

\*\*\* Chromatogram \*\*\*



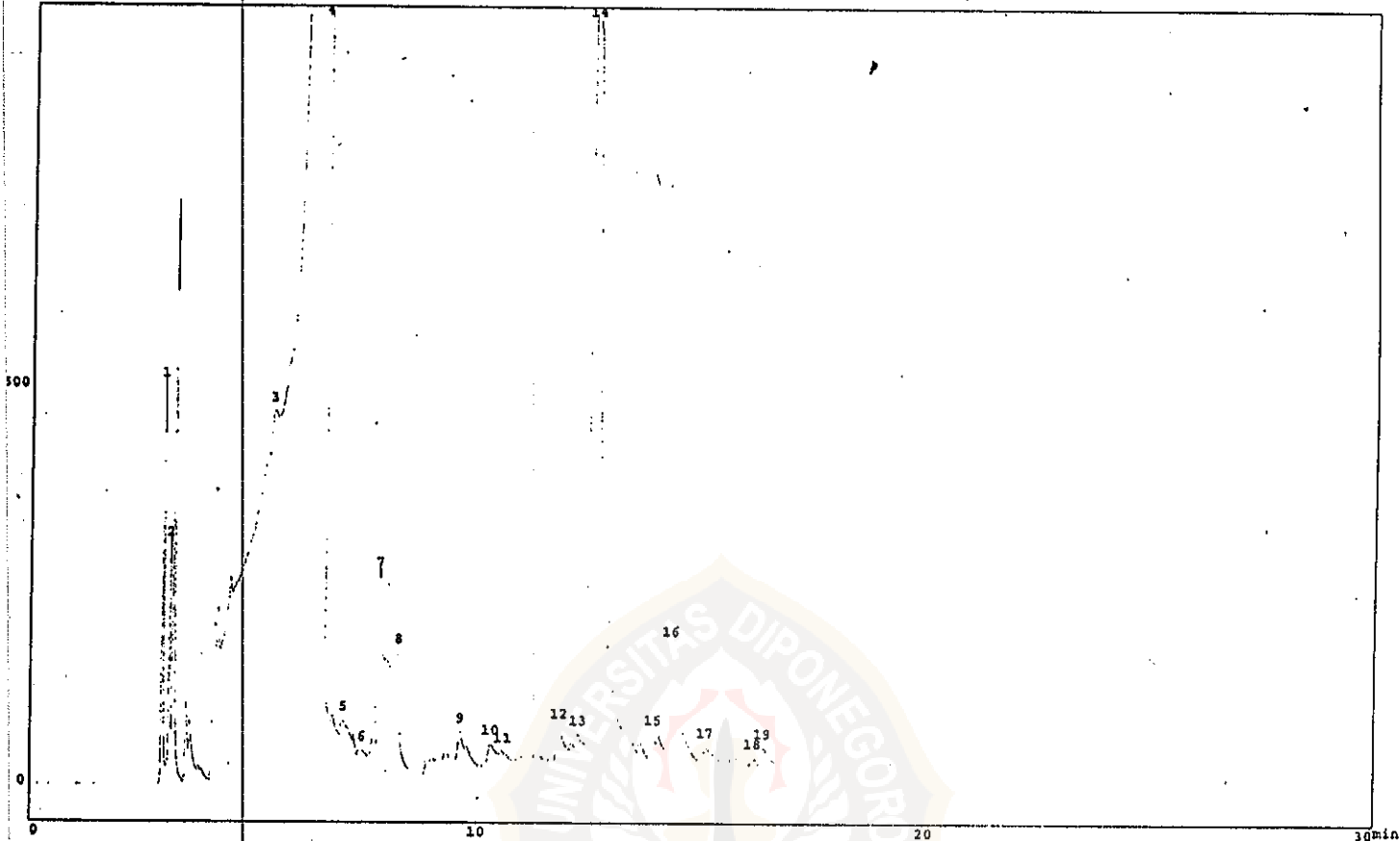
Peak Report \*\*\*

TIME	AREA	HEIGHT	CONC
3.186	2849170	434427	3.2579
3.567	1124857	115712	1.2862
4.540	5513850	287600	6.3048
5.925	51964041	1053603	59.4186
6.524	1366189	67128	1.5622
6.825	708401	62257	0.8100
7.362	2813758	147774	3.2174
7.779	1859026	123745	2.1257
8.575	539904	13187	0.6174
9.287	683047	39899	0.7810
10.067	176813	18115	0.2022
11.596	336271	30686	0.3845
11.894	160976	21633	0.1841
12.138	276430	24888	0.3161
12.364	15178648	867680	17.3561
13.824	283553	25388	0.1242
14.250	1619266	111281	1.8516
87454199	3445001		100.0000



ISS-CR10 SYS=1 Ch=1 REPORT NO=10 DATA=TEGUNG2.D01 00/00/00 05:33:02  
 Sample : Teguh P., PTK 2  
 Multiplier Factor: 1  
 Name : Unknown  
 Operator : Maryati

Chromatogram \*\*\*  
 mV

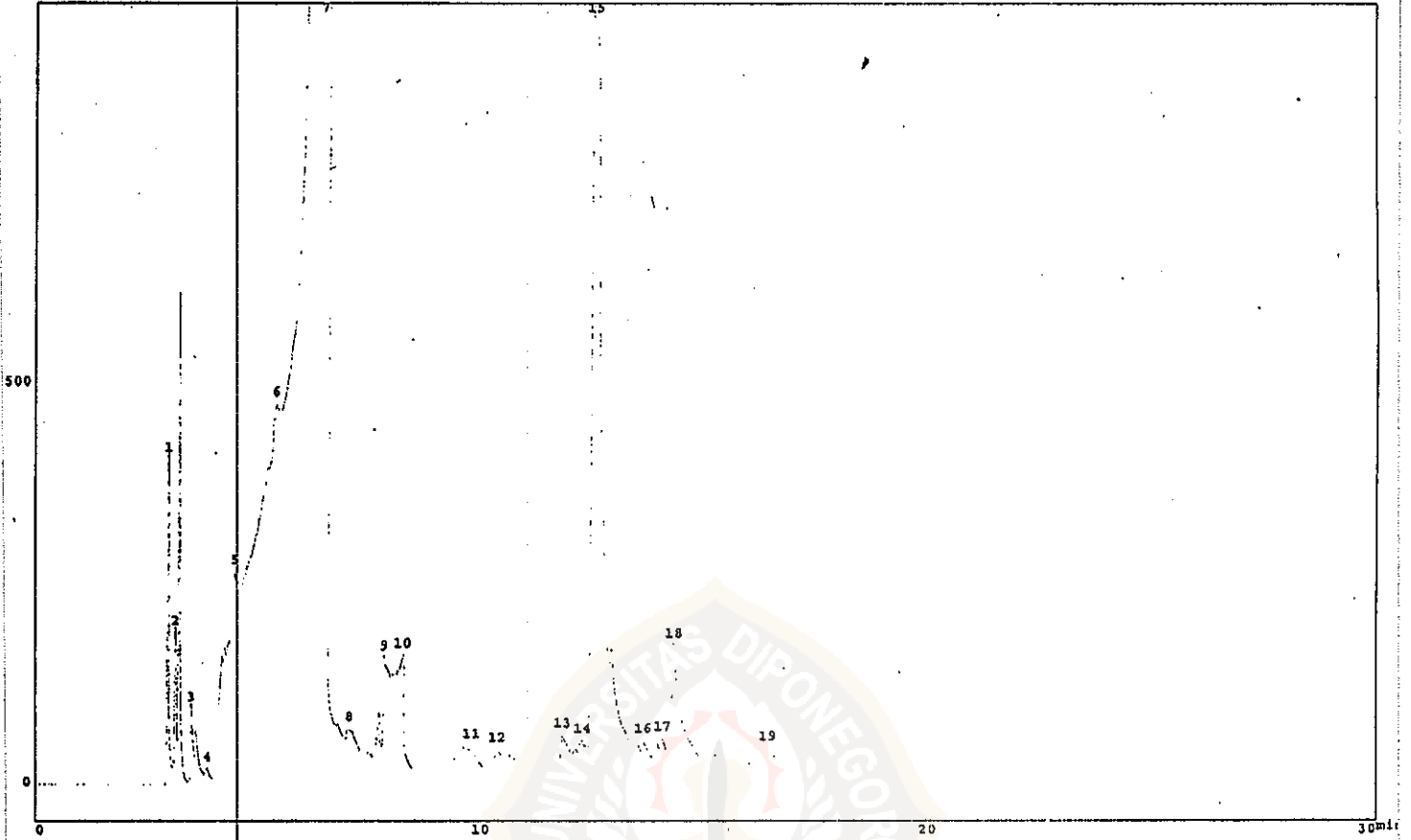


Peak Report \*\*\*

TIME	AREA	HEIGHT	CONC
2.986	1308795	443372	1.1466
3.145	3728254	241213	3.2663
5.425	24908976	462629	21.8227
6.550	55425197	1056300	48.8580
7.025	314496	22323	0.2755
7.450	47720	5615	0.0418
7.820	1179551	228490	2.7856
8.232	2014638	253766	1.7650
9.619	418212	14513	0.3664
10.299	302239	25074	0.2648
10.575	170018	13738	0.1490
11.819	458066	39625	0.4013
12.250	323734	31991	0.2836
12.500	18587834	1032809	16.2848
13.914	306720	25284	0.2687
14.300	2008174	149475	1.7594
15.092	285960	19829	0.2505
16.150	86868	10227	0.0761
16.372	266864	21964	0.2338
-----			
	114142316	4018239	100.0000

ISS-CR10 SYS-1 Ch-1 REPORT NO-9 DATA-TEGUH3B.D01 00/00/00 04:42:12  
 Sample : Teguh P., PTK3  
 Injection Factor: 1  
 Name : Unknown  
 Operator : Maryati

Chromatogram \*\*\*  
 mV



Peak Report \*\*\*

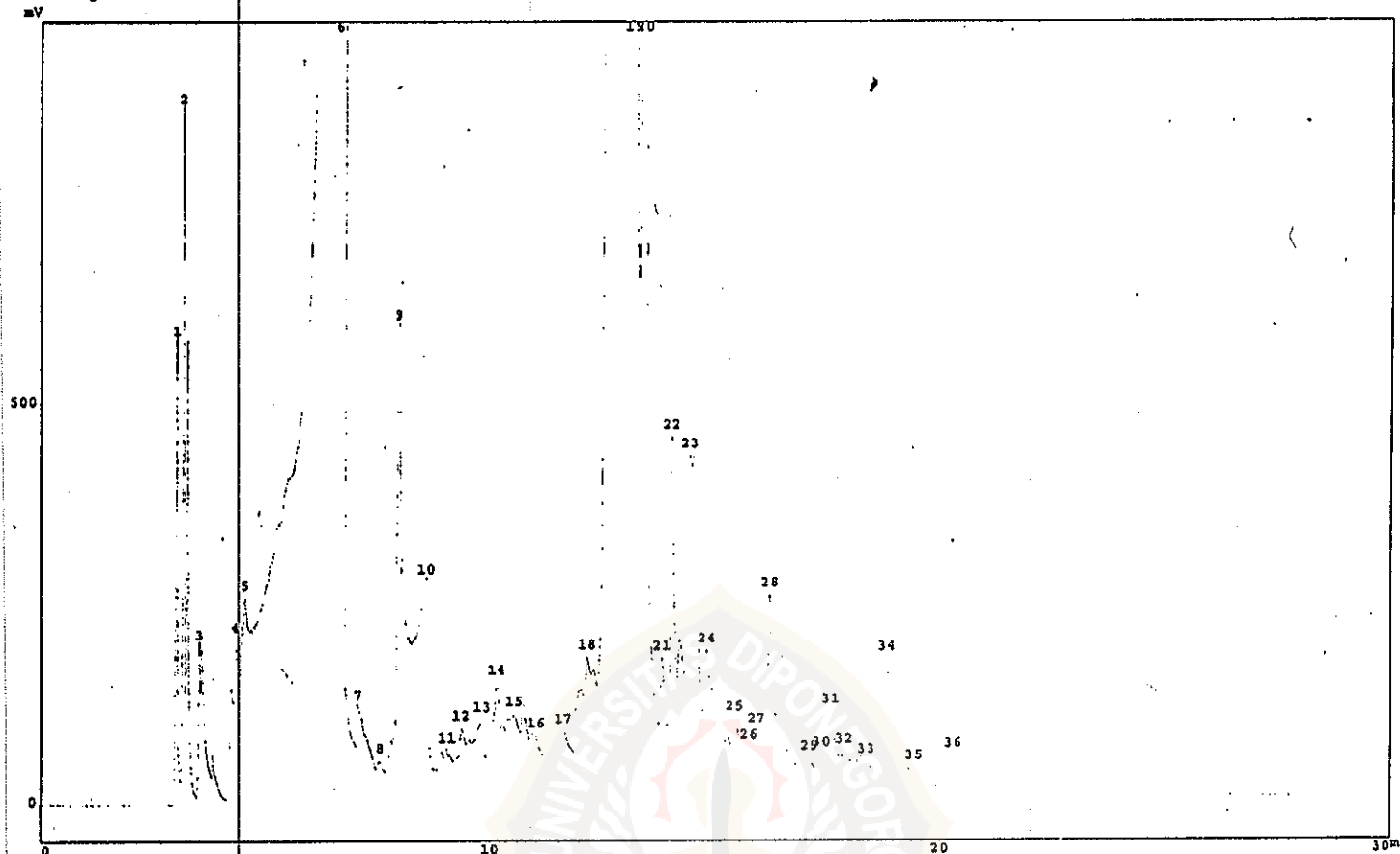
TIME	AREA	HEIGHT	CONC
3.014	1067181	380196	0.9758
3.189	2154304	176473	1.9699
3.562	750642	87133	0.6864
3.925	163414	17914	0.1494
4.525	5147352	255089	4.7067
5.425	19793903	467251	18.0995
6.494	53151265	1057816	48.6014
7.075	1142938	62552	1.0451
7.847	2615081	151757	2.3912
8.250	2592806	152050	2.3709
9.786	390731	22872	0.3573
10.366	117681	14384	0.1076
11.825	366502	30855	0.3351
12.278	299220	27101	0.2736
12.498	17039283	1035460	15.5807
13.625	79287	12175	0.0725
14.062	172005	16971	0.1573
14.300	2025537	149249	1.8521
16.413	292492	21548	0.2675
109361627	1138844		100.0000



ASS-CR10 SYS-1 Ch=1 REPORT NO=8 DATA-TEGUH4.D01 00/00/00 03:35:20

Sample : Teguh P., PKK4  
 Injection Factor: 1  
 Sample : Unknown  
 Operator : Maryati

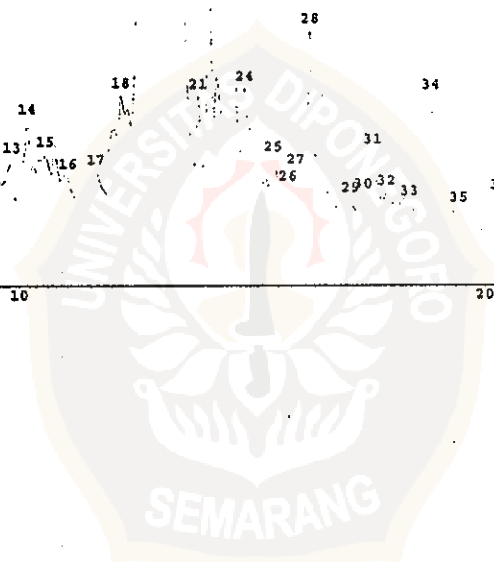
Chromatogram \*\*\*



Peak Report \*\*\*

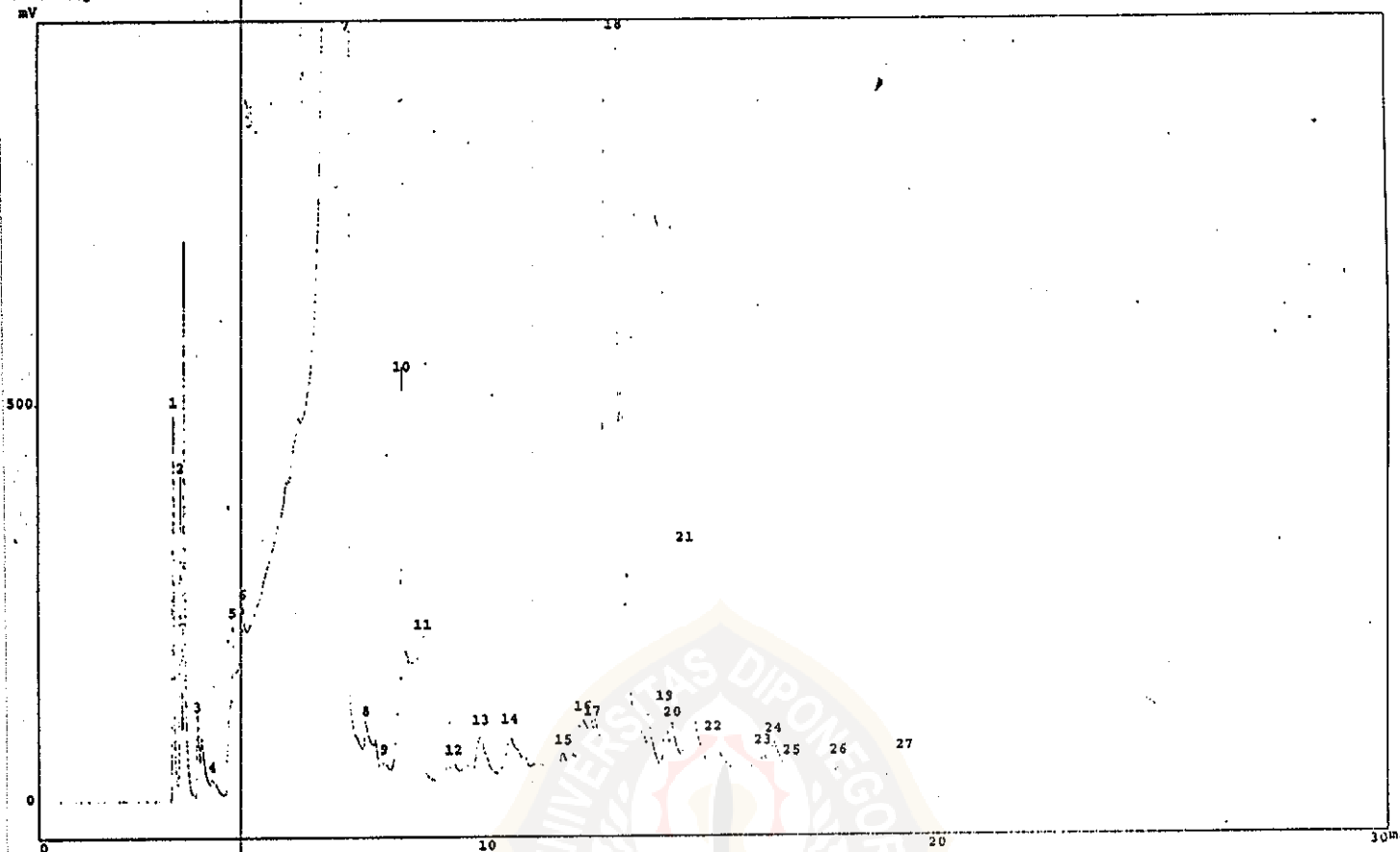
TIME	AREA	HEIGHT	CONC
3.039	1546073	536742	0.7360
3.192	4259484	770938	2.0276
3.571	2237062	177008	1.0649
4.371	2144117	191046	1.0207
4.588	2981841	252466	1.4194
6.662	76375041	1055556	36.3864
7.100	1999424	112595	0.9518
7.575	404517	44064	0.1911
7.965	6710272	588951	3.1943
8.576	5261889	270984	2.5048
9.050	1076312	55384	0.5124
9.361	1064047	79563	0.5065
9.826	1841937	89354	0.8768
10.147	1649270	136729	0.7851
10.535	3125461	95860	1.4878
11.025	1769616	68612	0.8424
11.626	1234512	71527	0.5877
12.149	4069652	161902	1.9373
13.150	49978801	1042274	23.7911
13.400	13840516	1041753	6.5884
13.812	1217809	158396	0.5797
14.023	3062455	419122	1.4578
14.429	8432633	409463	4.0141
14.813	2826595	163834	1.3455
15.438	1611652	79729	0.7672
15.750	398773	43904	0.1898
15.925	759290	65128	0.3614
16.212	3122255	229315	1.4863
17.100	386158	26758	0.1838
17.375	375113	32147	0.1786
17.575	888657	85590	0.4230
17.875	458089	33876	0.2181
18.375	523762	20916	0.2493
18.819	1874064	146277	0.8921
19.425	83509	10849	0.0398
20.288	485758	30185	0.2312

210073414 8798699 100.0000



SS-CR10 SYS-1 Ch-1 REPORT.NO=6 DATA-TEGUHS.D01 00/00/00 01:25:04  
 File : Teguh P., PTX5  
 Multiplier Factor: 1  
 Name : Unknown  
 Operator : Maryati

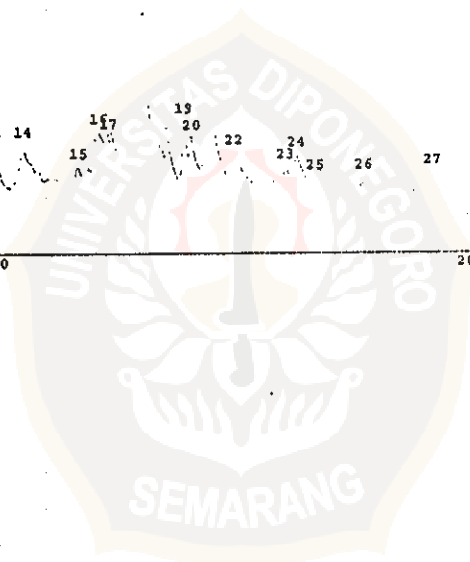
Chromatogram \*\*\*



Peak Report \*\*\*

TIME	AREA	HEIGHT	CONC
3.031	1312330	385123	0.9813
3.193	3019404	349681	2.2579
3.593	928354	99220	0.6942
3.925	237610	23029	0.1777
4.375	1720351	189036	1.2864
4.600	2940596	227932	2.1989
6.892	79506757	1045996	59.4537
7.325	446423	36589	0.3338
7.725	53786	8509	0.0402
8.114	3973838	475082	2.9716
8.575	2624429	181511	1.9625
9.257	373435	20528	0.2792
9.859	993756	53407	0.7431
10.509	825781	47171	0.6175
11.700	391582	19422	0.2928
12.136	963014	60911	0.7246
12.350	629848	58018	0.4710
12.800	27312700	1026701	20.4239
13.948	388771	61257	0.2907
14.125	306000	42137	0.2288
14.392	2953833	274792	2.2088
15.025	547411	38325	0.4093
16.134	239159	24334	0.1788
16.367	520618	40283	0.3893
16.775	207953	15619	0.1555
17.817	168929	15885	0.1263
19.292	136207	17894	0.1019

133728874 4842408 100.0000



Data : TEGUH2.D01 03/06/24 12:57:28  
 Sample : PIROLISIS TEMPURUNG, TEGUH  
 Operator : POY  
 Method File Name : TEGUH.MET

\*\*\*\* Peak Report \*\*\*\*

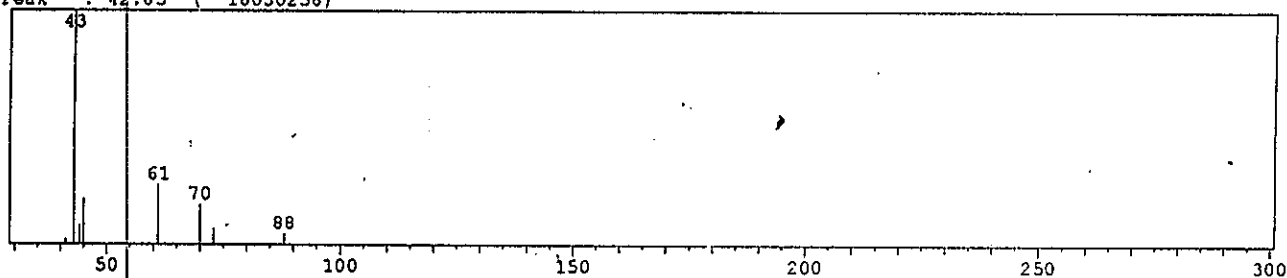
PKNO	R.Time	I.Time - F.Time	Area	Height	A/H(sec)	MK	%Total	Name
1	2.258	2.158 - 2.375	814342162	120861767	6.738	MC	37.62	
2	2.707	2.375 - 2.775	302718764	22198276	13.637	V	13.98	
3	2.967	2.775 - 3.142	87707002	4655977	18.838	V	4.05	
4	3.650	3.142 - 3.675	243774230	7083615	34.414	V	11.26	
5	10.478	10.158 - 10.608	633685879	36812019	17.214		29.27	
6	11.989	11.900 - 12.042	63658412	13979405	4.554		2.94	
7	13.747	13.708 - 13.800	18995045	7090629	2.679		0.88	
Total			2164881493				100.00	



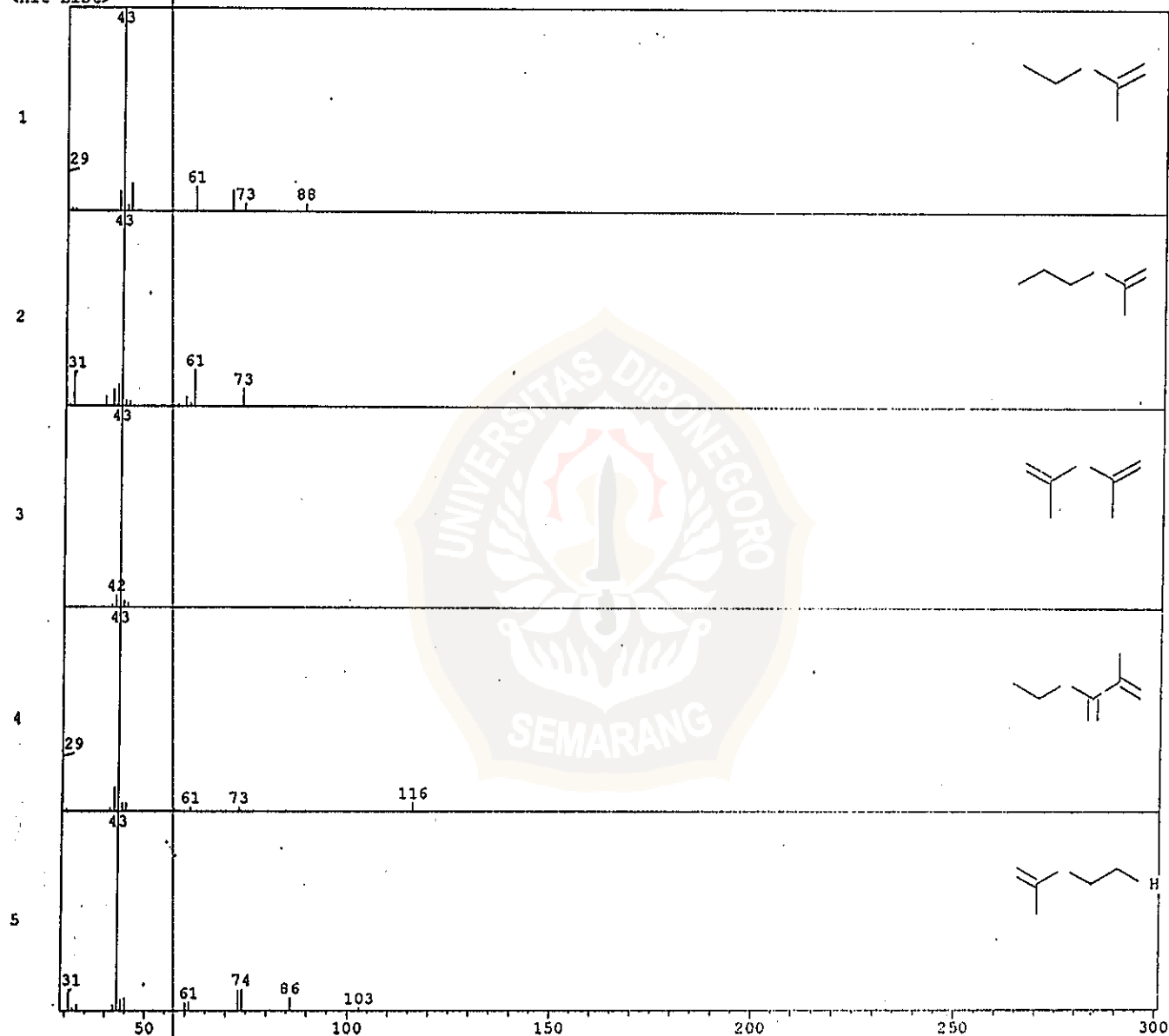
## Lampiran 8. Spektra massa produk perengkahan katalitik tempurung kelapa

&lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

 Mass Peak # : 8      Ret. Time : 2.300  
 Scan # : 37      B.G. Scan # : 54  
 Base Peak : 42.85 ( 16030256)


&lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	92	88	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> Ethyl Acetate	141-78-6	817	1
2	85	102	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub> n-Propyl acetate	108-60-4	1698	1
3	84	102	C <sub>4</sub> H <sub>6</sub> O <sub>3</sub> Acetic acid, anhydride	108-24-7	1680	1
4	83	116	C <sub>5</sub> H <sub>8</sub> O <sub>3</sub> Propanoic acid, 2-oxo-, ethyl ester	617-35-6	3211	1
5	83	104	C <sub>4</sub> H <sub>8</sub> O <sub>3</sub> 1,2-Ethanediol, monoacetate	542-59-6	1877	1

## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

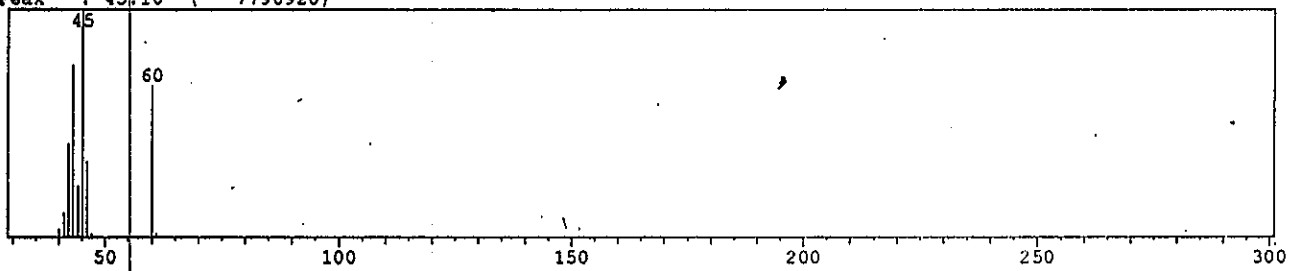
Mass Peak # : 10

Ret. Time : 2.625

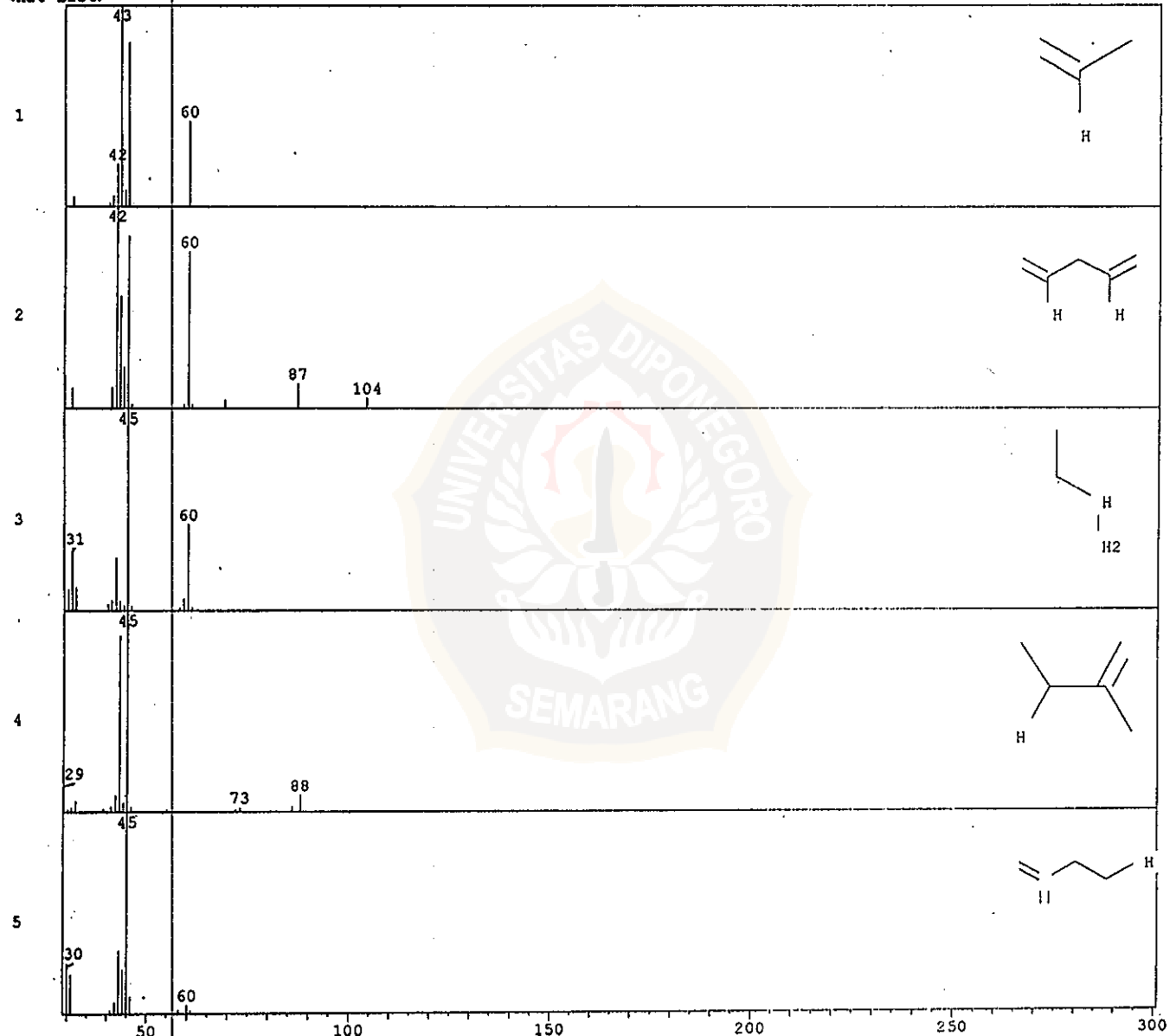
Scan # : 76

B.G. Scan # : 62

Base Peak : 45.10 ( 7790920)



## &lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	89	60	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> Acetic acid \$\$ Ethanoic acid \$\$ Ethylic acid \$\$ Glacial acetic acid \$\$ Methanecarboxy	64-19-7	116	1
2	87	104	C <sub>3</sub> H <sub>4</sub> O <sub>4</sub> Propanedioic acid \$\$ Malonic acid \$\$ Carboxyacetic acid \$\$ Dicarboxymethane \$\$ Methan	141-82-2	1844	1
3	83	60	C <sub>2</sub> H <sub>6</sub> N <sub>2</sub> Hydrazine, ethyl- \$\$ Ethylhydrazine \$\$ C <sub>2</sub> H <sub>5</sub> NHNH <sub>2</sub> \$\$ Hydrazine, ethyl-, ethanedioate (	624-40-6	121	1
4	82	88	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> 2-Butanone, 3-hydroxy- \$\$ .gamma.-Hydroxy-.beta.-oxobutane \$\$ Acetoin \$\$ Acetyl methy	513-86-0	799	1
5	82	91	C <sub>2</sub> H <sub>5</sub> NO <sub>3</sub> Ethanol, 2-nitro- \$\$ .beta.-Nitroethanol \$\$ 2-Nitroethanol \$\$ .beta.-Nitroalcohol	625-48-9	940	1

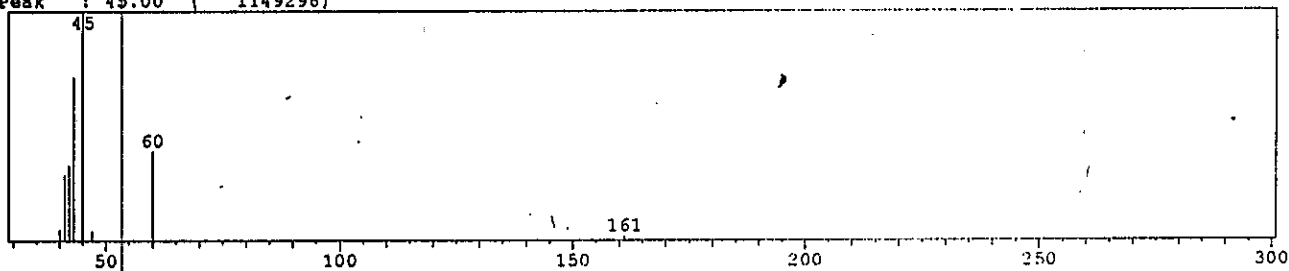
## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

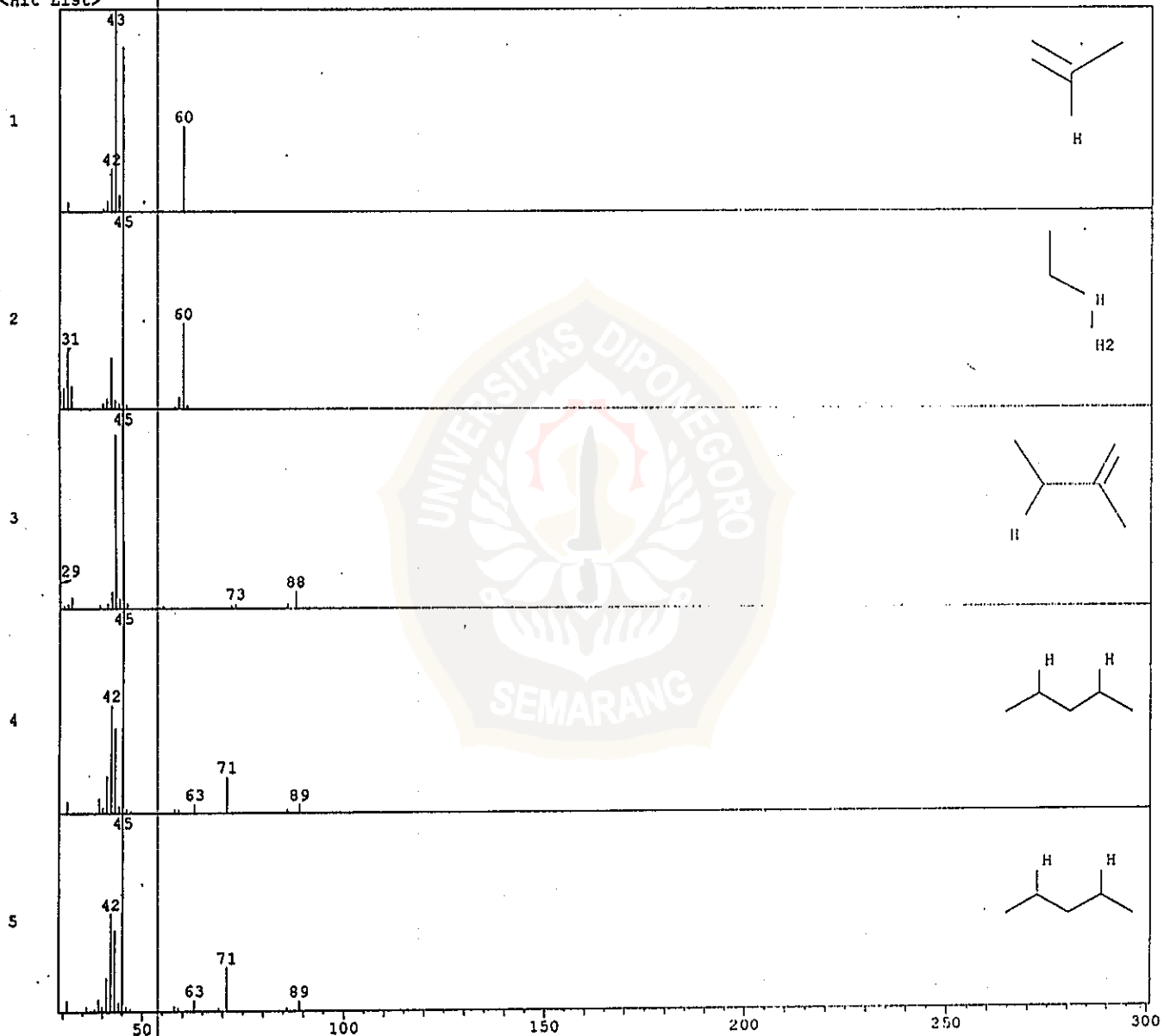
Mass Peak # : 12 Ret. Time : 2.958

Scan # : 116 B.G. Scan # : 107

Base Peak : 45.00 ( 1149296)



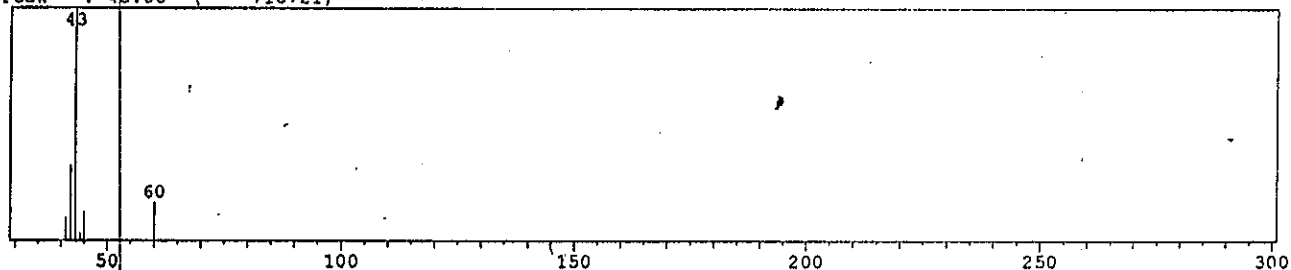
## &lt;Hit List&gt;



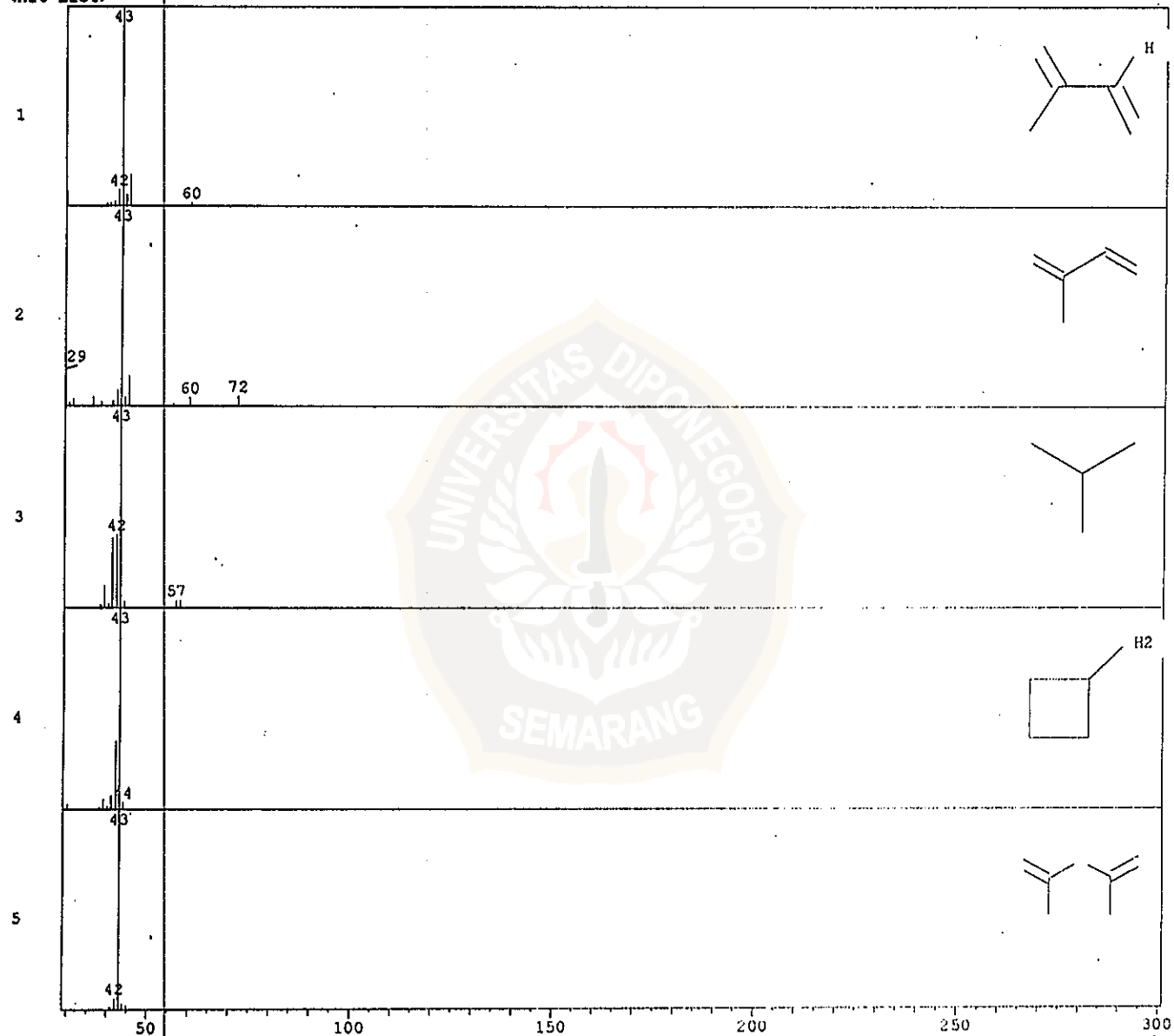
No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	89	60	C <sub>2</sub> H <sub>4</sub> O <sub>2</sub> Acetic acid \$\$ Ethanoic acid \$\$ Ethylic acid \$\$ Glacial acetic acid \$\$ Methanecarboxy	64-19-7	116	1
2	85	60	C <sub>2</sub> H <sub>8</sub> N <sub>2</sub> Hydrazine, ethyl- \$\$ Ethylhydrazine \$\$ C <sub>2</sub> H <sub>5</sub> NHNH <sub>2</sub> \$\$ Hydrazine, ethyl-, ethanedioate (	624-80-6	121	1
3	84	88	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub> 2-Butanone, 3-hydroxy- \$\$ .gamma.-Hydroxy-.beta.-oxobutane \$\$ Acetoin \$\$ Acetyl methy	513-86-0	799	1
4	83	104	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub> (2R, 4R)-(-)-Pentanediol	42075-32-1	1921	1
5	81	104	C <sub>5</sub> H <sub>12</sub> O <sub>2</sub> (2S, 4S)-(+)-Pentanediol	72345-23-4	1918	1

## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01  
 Mass Peak # : 23 Ret. Time : 3.708  
 Scan # : 206 B.G. Scan # : 283  
 Base Peak : 43.00 ( 710721)



## &lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	91	88	C <sub>3</sub> H <sub>4</sub> O <sub>3</sub> Propanoic acid, 2-oxo- \$\$ Pyruvic acid \$\$ .alpha.-Ketopropionic acid \$\$ Acetylformic	127-17-3	785	1
2	90	72	C <sub>3</sub> H <sub>4</sub> O <sub>2</sub> Propanal, 2-oxo- \$\$ Pyruvaldehyde \$\$ .alpha.-Ketopropionaldehyde \$\$ Acetylformaldehyd	78-98-8	252	1
3	89	58	C <sub>4</sub> H <sub>10</sub> Isobutane \$\$ Propane, 2-methyl- \$\$ Trimethylmethane \$\$ 1,1-Dimethylethane \$\$ 2-Methyl	75-28-5	98	1
4	89	71	C <sub>4</sub> H <sub>9</sub> N Cyclobutylamine \$\$ Aminocyclobutane \$\$ Cyclobutanamine-	2516-34-9	244	1
5	89	102	C <sub>4</sub> H <sub>6</sub> O <sub>3</sub> Acetic acid, anhydride \$\$ Acetic anhydride \$\$ Acetic oxide \$\$ Acetyl anhydride \$\$ Ace	108-24-7	1680	1

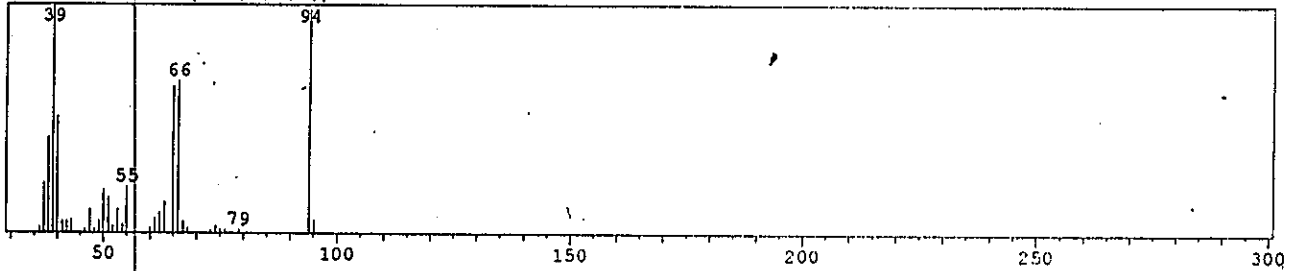
## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

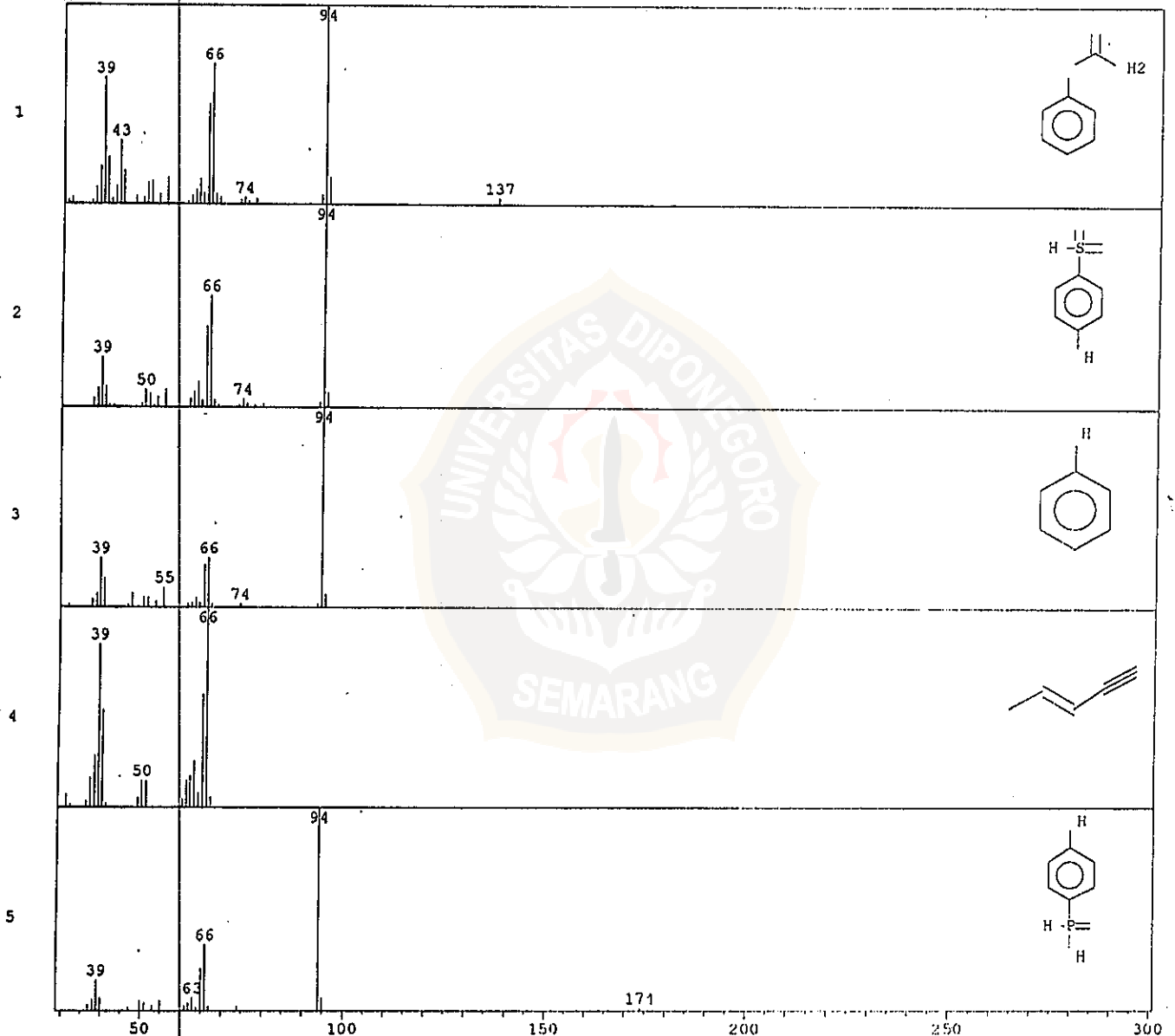
Mass Peak # : 34 Ret. Time : 10.483

Scan # : 1019 B.G. Scan # : 1098

Base Peak : 39.05 ( 6367474)



## &lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	87	137	C <sub>7</sub> H <sub>7</sub> NO <sub>2</sub> Carbamic acid, phenyl ester \$\$ Phenyl carbamate	642-46-8	6730	1
2	84	174	C <sub>6</sub> H <sub>6</sub> O <sub>4</sub> S Benzenesulfonic acid, 4-hydroxy- \$\$ Benzenesulfonic acid, p-hydroxy- \$\$ p-Hydroxybenz	58-67-9	16036	1
3	79	94	C <sub>6</sub> H <sub>6</sub> O Phenol \$\$ Baker's P and S Liquid and Ointment \$\$ Benzenol \$\$ Carboic acid \$\$ Hydroxy	108-95-2	1010	1
4	77	66	C <sub>5</sub> H <sub>6</sub> 3-Penten-1-yne \$\$ Propenylacetylene \$\$ 2-Penten-4-yne	2206-23-7	156	1
5	77	174	C <sub>6</sub> H <sub>7</sub> O <sub>4</sub> P Phosphonic acid, (p-hydroxyphenyl)- \$\$ 4-Hydroxybenzenephosphonic acid \$\$ (p-Hydroxyp	33795-18-5	16041	1



## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

Ret. Time : 11.992

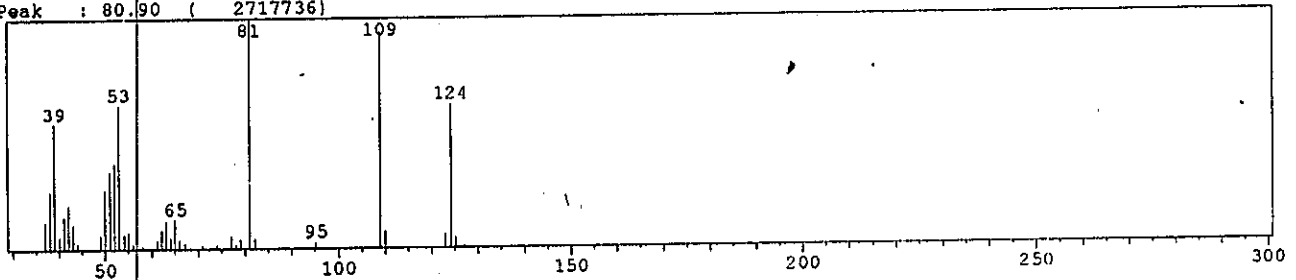
Mass Peak # : 39

B.G. Scan # : 1267

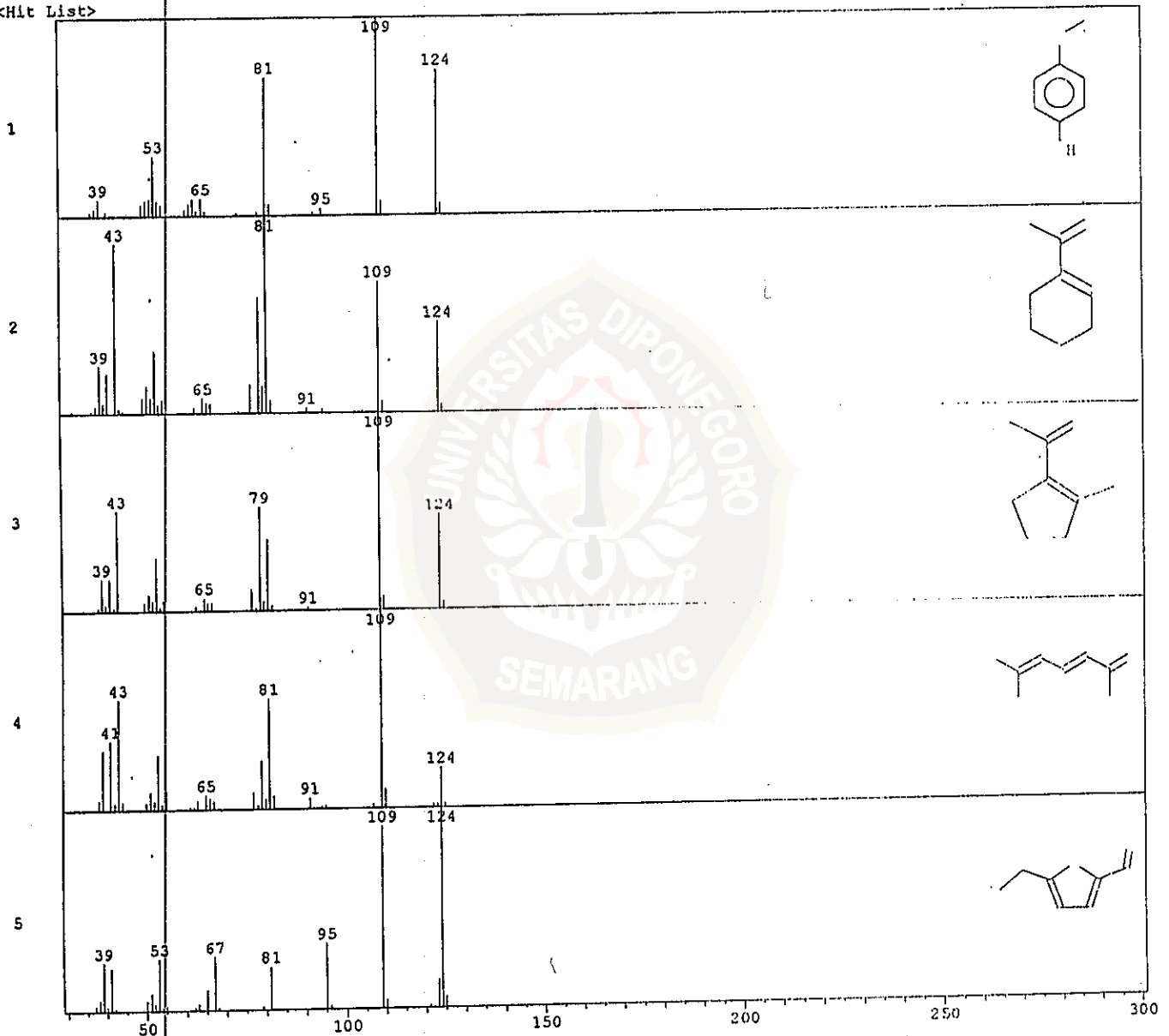
Scan # : 1200

Base Peak : 80.90

( 2717736)



## &lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	82	124	C <sub>7</sub> H <sub>8</sub> O <sub>2</sub> Mequinol \$\$ Phenol, 4-methoxy- \$\$ Phenol, p-methoxy- \$\$ p-Guaiacol \$\$ p-Hydroxyanisole	150-76-5	4138	1
2	79	124	C <sub>8</sub> H <sub>12</sub> O Ethanone, 1-(1-cyclohexen-1-yl)- \$\$ Ketone, 1-cyclohexen-1-yl methyl \$\$ Methyl 1-cycl	932-66-1	4169	1
3	78	124	C <sub>8</sub> H <sub>12</sub> O Ethanone, 1-(2-methyl-1-cyclopenten-1-yl)- \$\$ Ketone, methyl 2-methyl-1-cyclopenten-1	3168-90-9	4189	1
4	78	124	C <sub>8</sub> H <sub>12</sub> O 3,5-Heptadien-2-one, 6-methyl-, (E)-	16647-04-4	4186	1
5	78	124	C <sub>7</sub> H <sub>8</sub> O <sub>2</sub> 5-Ethyl-2-furaldehyde \$\$ 5-Ethyl-2-furancarboxaldehyde, 5-ethyl-	23074-10-4	4127	1

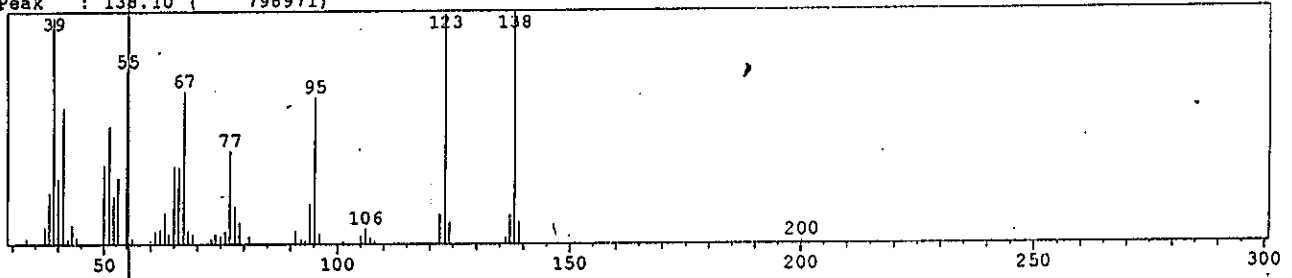
## &lt;Unknown Spectrum&gt;

Data : TEGUH2.D01

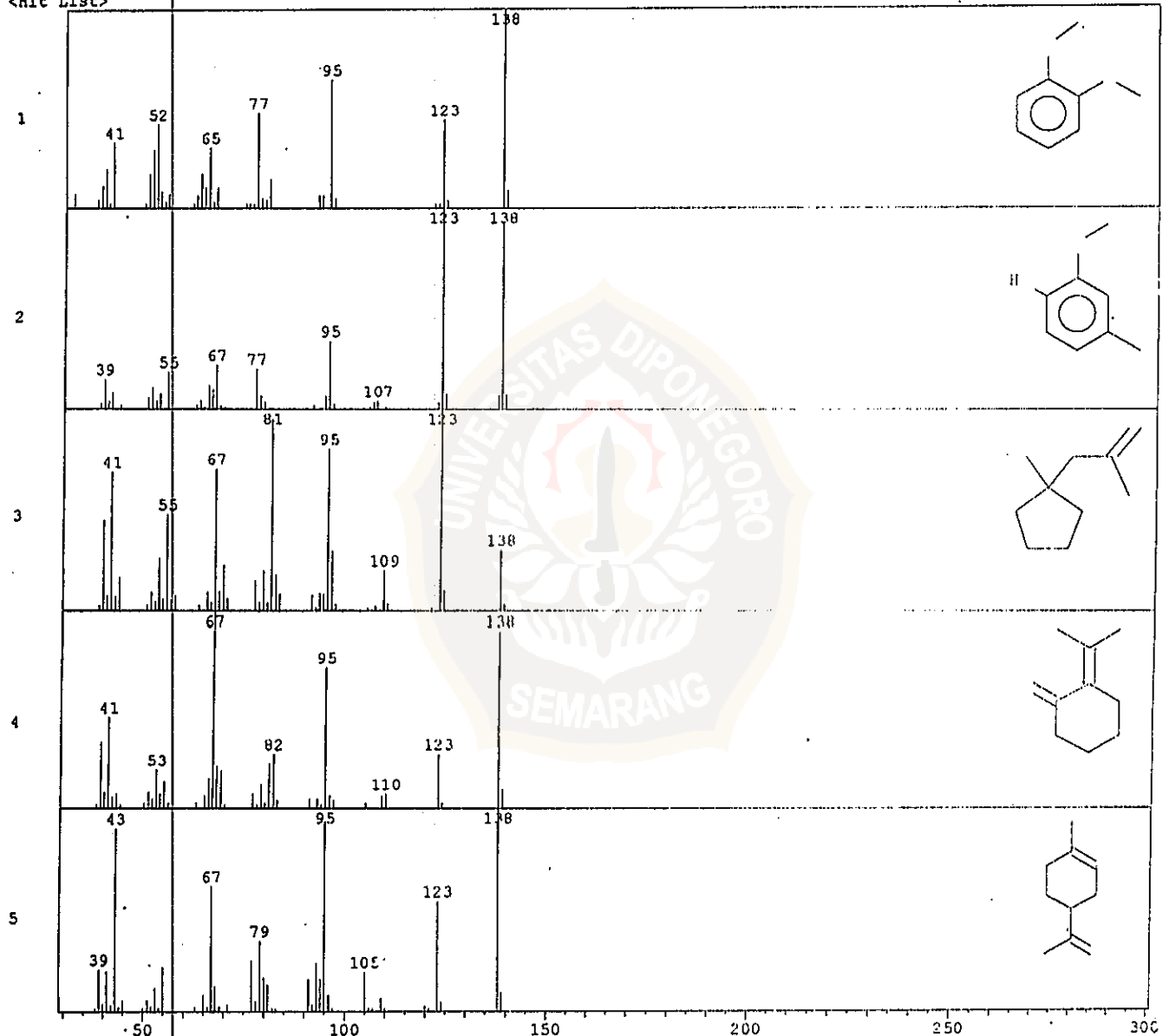
Mass Peak # : 60 Ret. Time : 13.750

Scan # : 1411 B.G. Scan # : 1359

Base Peak : 138.10 ( 798971)



## &lt;Hit List&gt;



No	SI	Mol. Wgt.	Mol. Form./Compound Name	CAS No.	Entry	LIB#
1	79	138	C <sub>8</sub> H <sub>10</sub> O <sub>2</sub> Benzene, 1,2-dimethoxy- \$\$ Benzene, o-dimethoxy- \$\$ o-Dimethoxybenzene \$\$ O,O-Dimethy	91-16-7	6904	1
2	79	138	C <sub>8</sub> H <sub>10</sub> O <sub>2</sub> Phenol, 2-methoxy-4-methyl- \$\$ p-Cresol, 2-methoxy- \$\$ p-Cresol \$\$ p-Methylguaiacol	93-51-6	6909	1
3	76	138	C <sub>10</sub> H <sub>18</sub> Cyclopentane, 1-methyl-1-(2-methyl-2-propenyl)-	74764-47-9	7096	1
4	75	138	C <sub>9</sub> H <sub>14</sub> O Cyclohexanone, 2-(1-methylethylidene)- \$\$ Cyclohexanone, 2-isopropylidene- \$\$ 2-Isopr	13747-73-4	6962	1
5	74	138	C <sub>9</sub> H <sub>14</sub> O Cyclohexene, 4-acetyl-1-methyl- \$\$ 4-Acetyl-1-methylcyclohexene	70286-20-3	6980	1