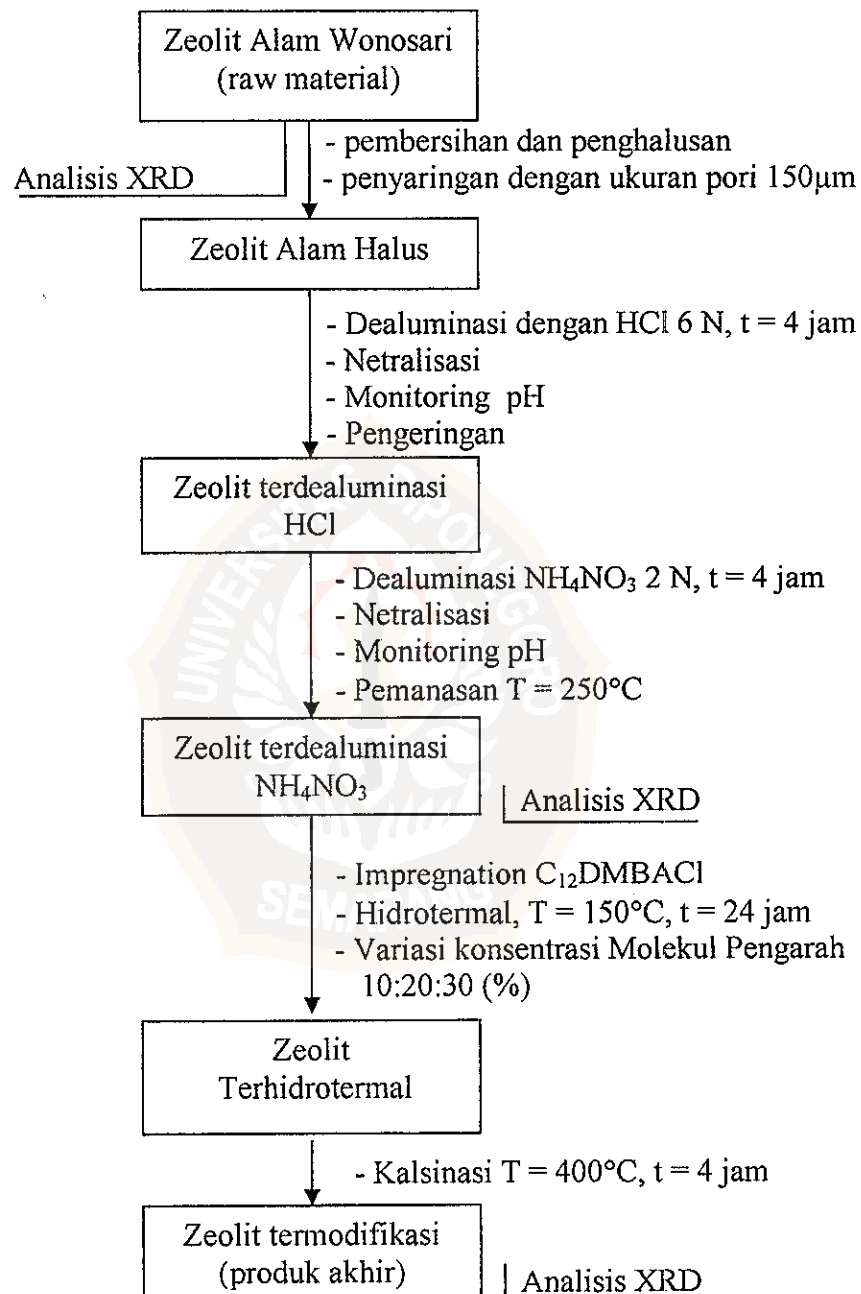


LAMPIRAN

Lampiran 1

Skema Kerja



Lampiran 2

Perhitungan Preparasi Bahan

2.1 Perhitungan Larutan HCl 6 N, 1000 mL

- HCl 37 %, Mr HCl = 36,46 g/mol, $\rho = 1,19 \text{ g/L}$, $n_{eq} = 1$

$$N_o = \% w/w \times \frac{\rho}{Mr} \times n_{eq}$$

$$N_o = \frac{37}{100} \times \frac{1,19 \text{ g/mL}}{36,46 \text{ g/mol}} \times 1 = 12,08 \text{ N}$$

- $$V_o = \frac{N \times V}{N_o}$$

Dengan V_o adalah volume HCl 37 % yang dibutuhkan

N_o adalah Normalitas HCl 37 % (HCl awal)

N adalah Normalitas larutan HCl yang diinginkan

V adalah volume larutan HCl yang diinginkan

Jadi banyaknya HCl yang dibutuhkan untuk membuat HCl 6 N 1000 mL adalah

$$V_o = \frac{6 \text{ N} \times 1000 \text{ mL}}{12,08} = 496,69 \text{ mL}$$

2.2 Perhitungan Larutan NH_4NO_3 2 N, 1000 mL

- Mr NH_4NO_3 adalah 80,04 g/mol, $n_{eq} = 1$

$$N = \frac{m / Mr}{V} \times n_{eq}$$

$$m = Mr \times V \times N \times n_{eq}$$

Dengan N adalah Normalits NH_4NO_3 yang diinginkan

V adalah volume NH_4NO_3 yang diinginkan

m adalah berat NH_4NO_3 yang dibutuhkan

Jadi banyaknya NH_4NO_3 yang dibutuhkan untuk membuat NH_4NO_3 2 N adalah

$$m = 80,04 \text{g/mol} \times 1\text{L} \times 2\text{N} \times 1 = 160,08 \text{g}$$



Lampiran 3

Perhitungan Komposisi Mineral Zeolit dan Kristalinitas Zeolit

3.1 Perhitungan Komposisi Mineral

Untuk NZ pada kuarsa

$$\begin{aligned} \% \text{ NZ} &= \frac{\sum \text{Luas Intensitas pada sudut - sudut Spesifik NZ Kuarsa}}{\sum \text{Total Luas Intensitas sudut - sudut yang ada}} \times 100 \% \\ &= \frac{6713}{123560} \times 100 \% \\ &= 5,43 \% \end{aligned}$$

3.2 Perhitungan Kristalinitas

$$\% \text{ Kristalinitas} = \frac{\sum \text{luas area } 2\theta \text{ pada } 5 - 60^\circ \text{ sampel}}{\sum \text{luas area } 2\theta \text{ pada } 5 - 60^\circ \text{ standard}} \times 100 \%$$

untuk AZ

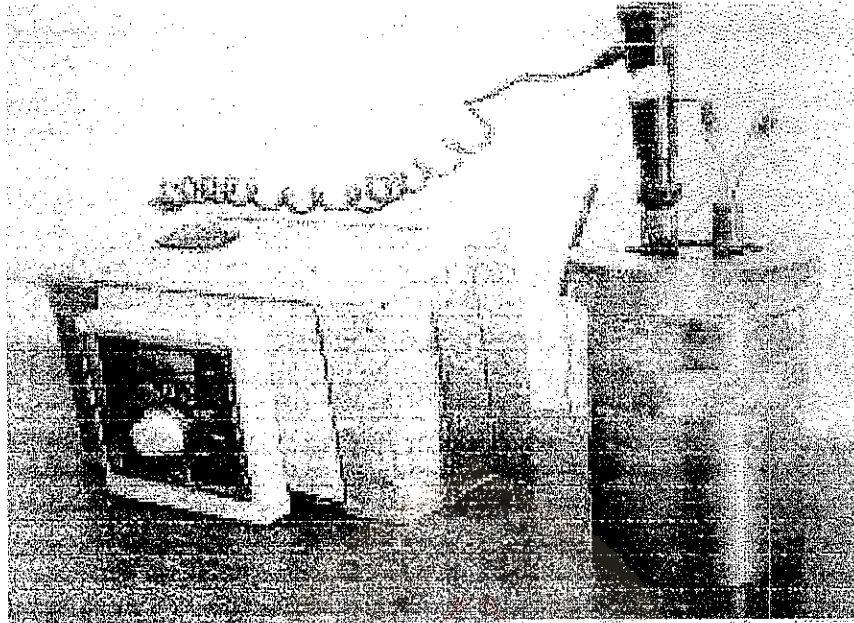
$$\begin{aligned} \% \text{ Kristalinitas AZ} &= \frac{22474}{195042} \times 100 \% \\ &= 114,065 \% \end{aligned}$$

terjadi peningkatan kristalinitas sebesar 14,07 %

Lampiran 4

Desain Alat Pada Proses Hidrotermal Dan Kalsinasi

4.1 Desain Alat pada Proses Hidrotermal



4.2 Desain Alat pada Proses Kalsinasi



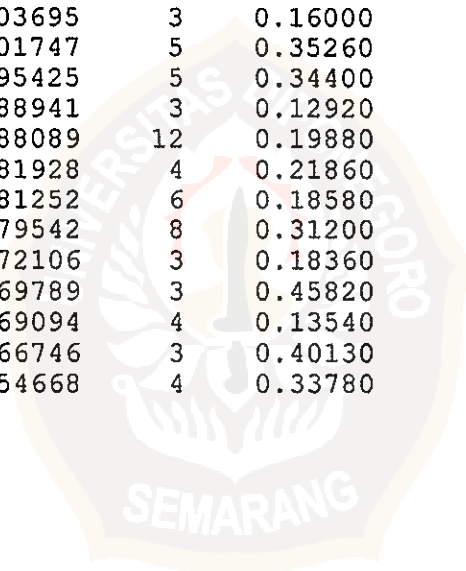
Lampiran 5

Data XRD Zeolit

#	Strongest 3 peaks						
no.	peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	30	25.5794	3.47964	100	0.21870	1626	21355
2	22	22.1739	4.00575	62	0.28300	1009	16306
3	35	27.6577	3.22271	55	0.45040	893	19861

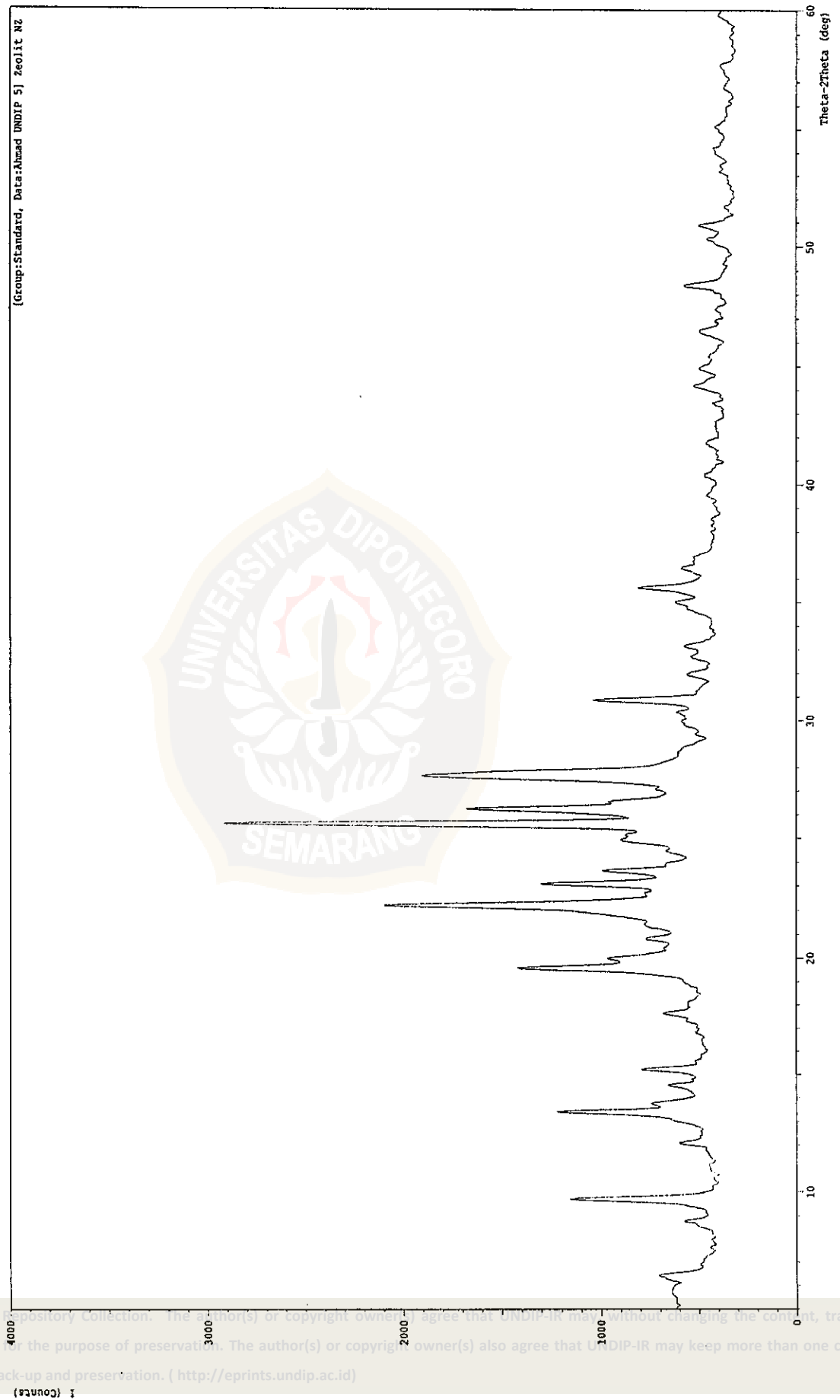
#	Peak Data List						
no.	peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	5.8800	15.01847	3	0.62860	54	1569	
2	6.2600	14.10764	5	0.23000	86	810	
3	6.4400	13.71372	8	0.22900	132	1454	
4	8.5600	10.32150	3	0.18940	55	454	
5	8.7300	10.12088	6	0.30000	102	1344	
6	9.3600	9.44104	4	0.18000	71	1107	
7	9.6923	9.11808	31	0.25050	503	6922	
8	12.0818	7.31957	6	0.22090	102	1683	
9	13.0400	6.78379	6	0.25200	105	1971	
10	13.3928	6.60587	31	0.25380	500	5970	
11	13.7600	6.43040	11	0.27820	174	3064	
12	14.5261	6.09294	7	0.23620	115	1858	
13	15.2195	5.81687	13	0.22900	214	3065	
14	17.3200	5.11587	3	0.23560	55	947	
15	17.6141	5.03111	8	0.27830	133	2601	
16	19.2800	4.59999	7	0.17100	116	1859	
17	19.5625	4.53419	36	0.27310	581	7431	
18	19.9800	4.44038	16	0.28220	259	5214	
19	20.8082	4.26547	6	0.22080	104	1348	
20	21.4200	4.14501	6	0.38000	94	1725	
21	21.7600	4.08100	12	0.31200	192	4038	
22	22.1739	4.00575	62	0.28300	1009	16306	
23	22.6800	3.91750	6	0.00000	97	0	
24	23.0667	3.85269	30	0.23530	481	6939	
25	23.5979	3.76715	17	0.24290	280	3866	
26	23.9400	3.71409	4	0.14760	60	681	
27	24.4600	3.63629	4	0.25720	62	893	
28	24.9400	3.56739	12	0.45200	200	3938	
29	25.1200	3.54223	11	0.00000	184	0	
30	25.5794	3.47964	100	0.21870	1626	21355	
31	26.1931	3.39949	45	0.27920	738	11079	
32	26.5400	3.35584	15	0.21680	236	3290	
33	27.0600	3.29252	5	0.24000	82	1134	
34	27.3000	3.26412	11	0.17180	177	1707	
35	27.6577	3.22271	55	0.45040	893	19861	
36	28.2000	3.16196	6	0.00000	95	0	
37	28.3000	3.15101	4	0.00000	70	0	
38	28.5600	3.12291	3	0.00000	54	0	
39	28.6800	3.11012	4	0.00000	61	0	
40	28.8200	3.09533	4	0.22800	57	773	
41	29.7600	2.99966	5	0.18660	74	1428	
42	29.9600	2.98009	5	0.00000	82	0	
43	30.3400	2.94363	6	0.21340	100	2248	
44	30.8367	2.89734	25	0.22450	412	5627	

peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
45	31.9387	2.79984	5	0.26750	80	1206
46	32.7000	2.73637	4	0.33000	70	1186
47	33.1327	2.70162	6	0.25890	99	1478
48	34.5400	2.59470	3	0.15120	54	931
49	34.7200	2.58165	5	0.00000	89	0
50	34.9600	2.56448	8	0.33780	127	2152
51	35.3200	2.53916	5	0.17000	87	934
52	35.5858	2.52080	17	0.24990	269	3697
53	36.2600	2.47546	4	0.20000	64	805
54	36.4400	2.46365	7	0.28440	110	1598
55	36.7600	2.44293	4	0.00000	66	0
56	36.9400	2.43144	4	0.16660	67	962
57	40.3700	2.23241	4	0.28000	62	1548
58	41.7125	2.16361	3	0.39500	56	1960
59	44.0000	2.05629	4	0.16000	64	515
60	44.1800	2.04833	6	0.20800	102	1010
61	44.4400	2.03695	3	0.16000	49	435
62	44.8923	2.01747	5	0.35260	81	2114
63	46.4280	1.95425	5	0.34400	87	2075
64	48.1200	1.88941	3	0.12920	53	642
65	48.3519	1.88089	12	0.19880	187	2295
66	50.1000	1.81928	4	0.21860	71	942
67	50.3000	1.81252	6	0.18580	96	933
68	50.8127	1.79542	8	0.31200	129	2524
69	53.1762	1.72106	3	0.18360	52	683
70	53.9600	1.69789	3	0.45820	55	1233
71	54.2000	1.69094	4	0.13540	58	444
72	55.0273	1.66746	3	0.40130	54	1750
73	59.7400	1.54668	4	0.33780	62	1431



*** Multi Plot ***

File Name : Standard\Ahmad UNDIP 5
 Sample Name : Zeolit NZ
 Date & Time : 03-13-03 13:24:02
 Comment : Zeolit NZ
 Condition
 X-ray Tube : Cu(1.54060 A) Voltage : 40.0 kV Current : 30.0 mA
 Scan Range : 5.0000 <-> 60.0000 deg Step Size : 0.0200 deg
 Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm



Strongest 3 peaks

no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	28	25.5975	3.47723	100	0.22060	1907	22835
2	21	22.1897	4.00294	68	0.28210	1292	22506
3	32	27.5600	3.23391	58	0.28240	1102	16124

Peak Data List

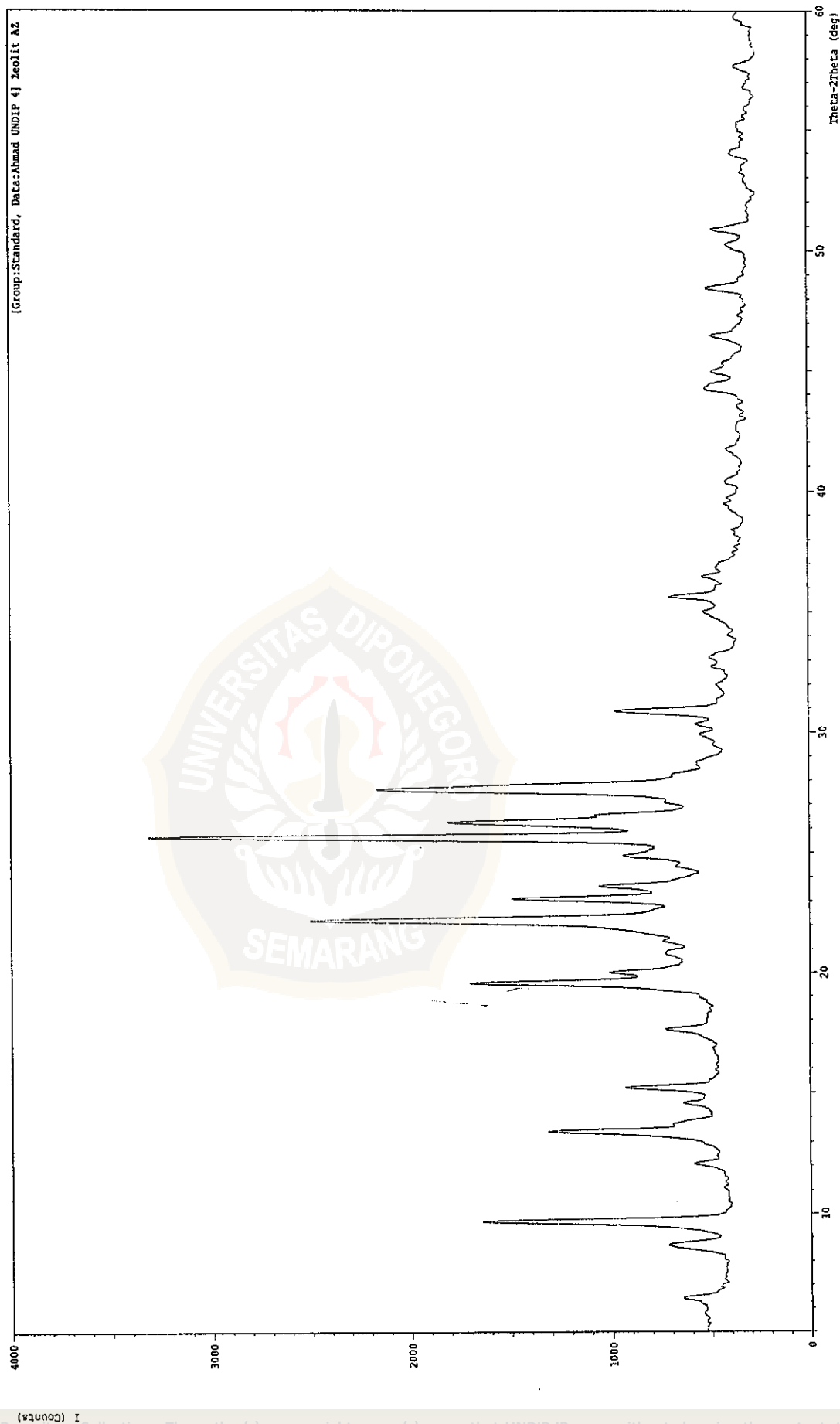
peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	6.2000	14.24403	3	0.99560	58	1938
2	6.4002	13.79891	7	0.30050	133	1731
3	8.6490	10.21549	11	0.37800	203	4299
4	9.2000	9.60487	3	0.25140	64	1963
5	9.6677	9.14123	44	0.25410	834	11695
6	12.0777	7.32205	5	0.23040	97	1319
7	13.1600	6.72220	8	0.20400	152	2247
8	13.3850	6.60971	30	0.25730	572	6688
9	13.8000	6.41186	6	0.21720	115	2263
10	14.5443	6.08536	6	0.23530	115	1966
11	15.1850	5.83001	17	0.24240	318	4673
12	17.5885	5.03837	9	0.25710	164	2929
13	19.2200	4.61421	6	0.14000	117	1340
14	19.5421	4.53888	41	0.25730	786	10631
15	20.0000	4.43598	15	0.24940	292	4360
16	20.2400	4.38392	4	0.13720	77	687
17	20.7927	4.26862	4	0.38550	73	1435
18	21.3400	4.16036	4	0.19500	80	777
19	21.6400	4.10336	7	0.23000	129	2385
20	21.8200	4.06992	12	0.00000	231	0
21	22.1897	4.00294	68	0.28210	1292	22506
22	22.6600	3.92091	6	0.00000	112	0
23	23.0855	3.84959	32	0.23680	617	8873
24	23.5764	3.77054	17	0.29290	331	4943
25	23.9200	3.71715	3	0.17340	66	832
26	24.4400	3.63922	4	0.17720	81	803
27	24.9459	3.56656	12	0.44810	235	6375
28	25.5975	3.47723	100	0.22060	1907	22835
29	26.1978	3.39889	44	0.31850	833	14130
30	26.5400	3.35584	17	0.18520	324	3754
31	27.0400	3.29491	6	0.17540	106	1468
32	27.5600	3.23391	58	0.28240	1102	16124
33	27.8000	3.20654	33	0.19400	635	6795
34	28.2000	3.16196	7	0.33200	125	2852
35	28.6960	3.10842	3	0.36800	58	1122
36	29.8422	2.99159	4	0.33100	78	1529
37	30.3124	2.94625	5	0.28710	91	1405
38	30.8439	2.89668	20	0.25660	380	5651
39	32.7000	2.73637	4	0.15760	69	677
40	33.1078	2.70359	4	0.44220	84	1676
41	34.7800	2.57734	3	0.40000	66	1449
42	35.0200	2.56022	5	0.31200	102	1556
43	35.6153	2.51878	12	0.22130	238	3506
44	36.2800	2.47414	3	0.16340	63	942

peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
45	36.4400	2.46365	6	0.22000	120	878
46	36.8200	2.43909	4	0.56440	68	1935
47	39.3612	2.28727	4	0.38250	67	1467
48	39.7274	2.26703	3	0.15660	61	525
49	40.4002	2.23081	3	0.30450	62	1034
50	44.2000	2.04745	7	0.27500	140	2204
51	44.4600	2.03608	5	0.18660	104	1073
52	44.9556	2.01478	6	0.26480	116	1619
53	45.3000	2.00026	3	0.25500	64	1153
54	46.4291	1.95421	6	0.25380	113	1805
55	48.4283	1.87810	8	0.26330	150	2378
56	50.0200	1.82200	3	0.10800	58	454
57	50.2600	1.81386	4	0.20920	77	1105
58	50.8358	1.79466	8	0.23830	144	2192
59	53.9400	1.69848	4	0.27700	76	1412
60	54.1200	1.69325	3	0.19420	62	921
61	57.6509	1.59766	4	0.32940	76	1606
62	59.7590	1.54624	4	0.31400	78	1765



*** Multi Plot ***

File Name : Standard\Ahmad \UNDIP 4
Sample Name : Zeolit AZ Comment : Zeolit AZ
Date & Time : 03-13-03 13:36:53
Condition
X-ray Tube : Cu(1.54060 A) Voltage : 40.0 kV Current : 30.0 mA
Scan Range : 5.0000 <-> 60.0000 deg Step Size : 0.0200 deg
Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm



# Strongest 3 peaks							
no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	26	25.5638	3.48173	100	0.20540	1966	23662
2	20	22.1478	4.01041	66	0.27520	1295	19886
3	30	27.5939	3.23002	56	0.39270	1097	17609

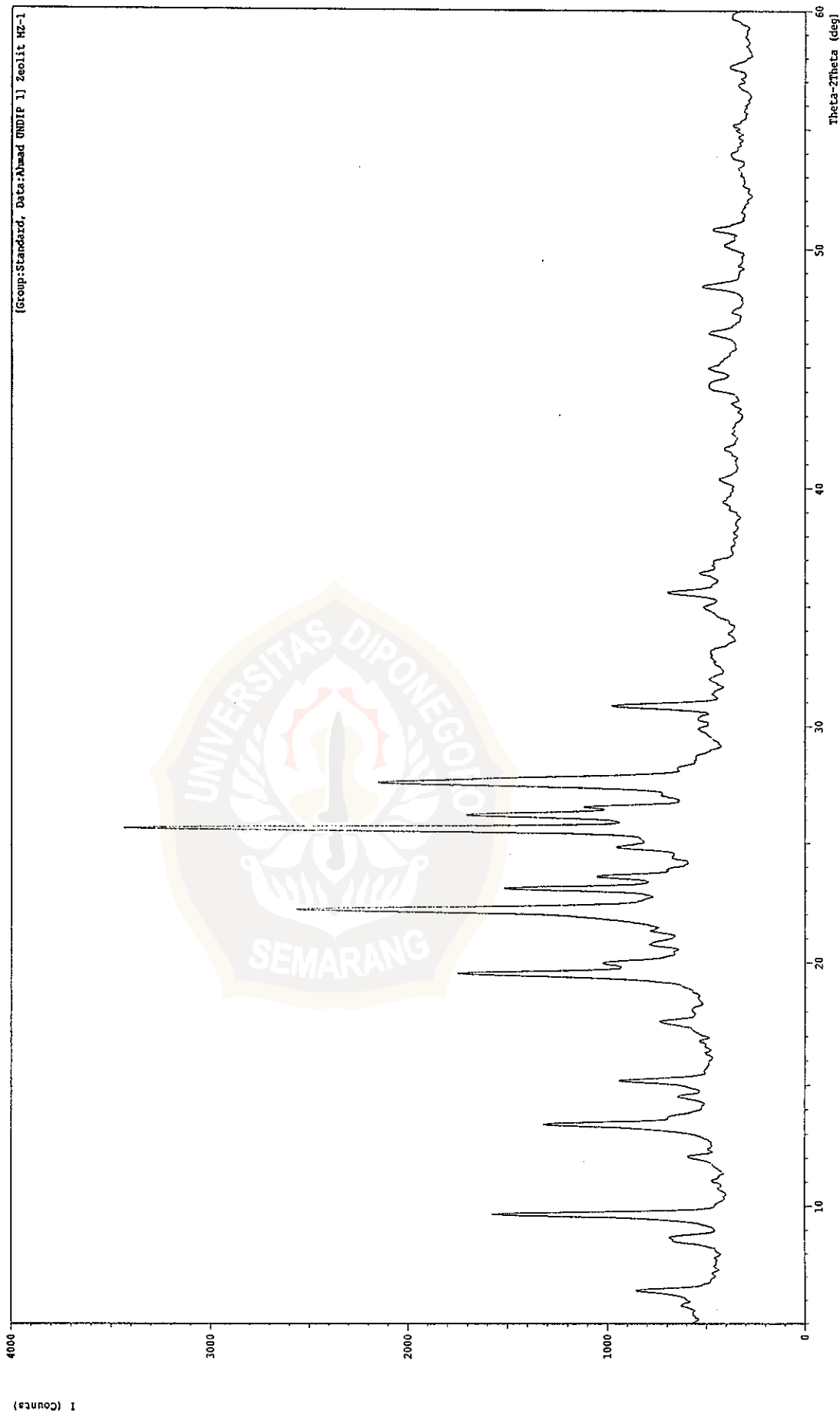
# Peak Data List							
peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)	
1	5.7800	15.27808	4	0.26500	73	1542	
2	6.3854	13.83086	12	0.26920	242	3812	
3	8.5200	10.36987	8	0.26760	161	1983	
4	8.6800	10.17907	9	0.25900	171	2201	
5	9.6459	9.16184	40	0.24780	782	12122	
6	12.0260	7.35341	5	0.25790	101	1865	
7	13.1400	6.73239	9	0.22660	171	2665	
8	13.3684	6.61788	29	0.25690	571	5865	
9	13.6800	6.46783	7	0.31200	143	3044	
10	14.5145	6.09779	5	0.24750	102	1406	
11	14.8800	5.94882	3	0.17340	59	707	
12	15.1633	5.83831	16	0.23330	306	3892	
13	17.5475	5.05005	8	0.31260	152	3339	
14	19.2200	4.61421	7	0.16000	132	1885	
15	19.5058	4.54724	40	0.25920	782	9961	
16	19.9600	4.44478	14	0.26440	271	4888	
17	20.7584	4.27559	4	0.23510	82	926	
18	21.2928	4.16948	4	0.13140	71	523	
19	21.7400	4.08471	10	0.27760	190	4175	
20	22.1478	4.01041	66	0.27520	1295	19886	
21	23.0546	3.85468	30	0.22050	599	7959	
22	23.5658	3.77221	15	0.23610	294	3882	
23	23.8800	3.72328	3	0.20800	62	763	
24	24.8478	3.58041	11	0.29900	213	3895	
25	25.1400	3.53946	6	0.00000	115	0	
26	25.5638	3.48173	100	0.20540	1966	23662	
27	26.1648	3.40310	37	0.27380	732	11359	
28	26.5200	3.35833	17	0.17040	332	3406	
29	27.0400	3.29491	4	0.22000	72	1023	
30	27.5939	3.23002	56	0.39270	1097	17609	
31	27.8200	3.20428	22	0.15580	436	3087	
32	28.1600	3.16636	4	0.36800	78	2833	
33	29.7916	2.99655	4	0.43670	72	1680	
34	30.2600	2.95123	4	0.19660	81	685	
35	30.4000	2.93795	3	0.17200	62	580	
36	30.8053	2.90022	20	0.24830	390	5415	
37	32.8948	2.72061	3	0.76310	66	3800	
38	34.8520	2.57218	5	0.57600	93	2758	
39	35.5565	2.52281	11	0.28960	224	3824	
40	36.3803	2.46755	6	0.26730	118	2387	
41	36.7400	2.44422	4	0.00000	70	0	
42	36.9400	2.43144	3	0.14000	67	904	
43	40.3201	2.23506	3	0.27630	63	1338	
44	41.6075	2.16883	3	0.19500	61	994	

peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
45	44.0800	2.05274	5	0.24000	108	1424
46	44.3200	2.04218	5	0.32000	99	1456
47	44.9150	2.01650	5	0.29000	108	2494
48	46.3926	1.95566	6	0.29030	110	1977
49	48.3898	1.87951	8	0.25240	158	2505
50	50.0000	1.82269	3	0.19200	61	458
51	50.1600	1.81725	4	0.26660	74	1027
52	50.7899	1.79618	7	0.21800	137	2063
53	53.8866	1.70003	3	0.36670	60	2198
54	57.5674	1.59978	5	0.27650	91	1969
55	59.7200	1.54715	3	0.44000	65	1535



*** Multi Plot ***

File Name : Standard\Ahmad UNDIP 1
Sample Name : Zeolit MZ-1
Date & Time : 03-13-03 10:47:38
Condition :
X-ray Tube : Cu(1.54060 A) Voltage : 40.0 kV Current : 30.0 mA
Scan Range : 2.5000 <-> 60.0000 deg Step Size : 0.0200 deg
Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm
Comment : Zeolit MZ-1



#	Strongest	3 peaks					
no.	peak	2Theta	d	I/I1	FWHM	Intensity	Integrated Int
	no.	(deg)	(A)		(deg)	(Counts)	(Counts)
1	26	25.5572	3.48262	100	0.21810	1923	23341
2	20	22.1266	4.01421	63	0.29610	1217	15529
3	30	27.5400	3.23622	57	0.30540	1095	15168

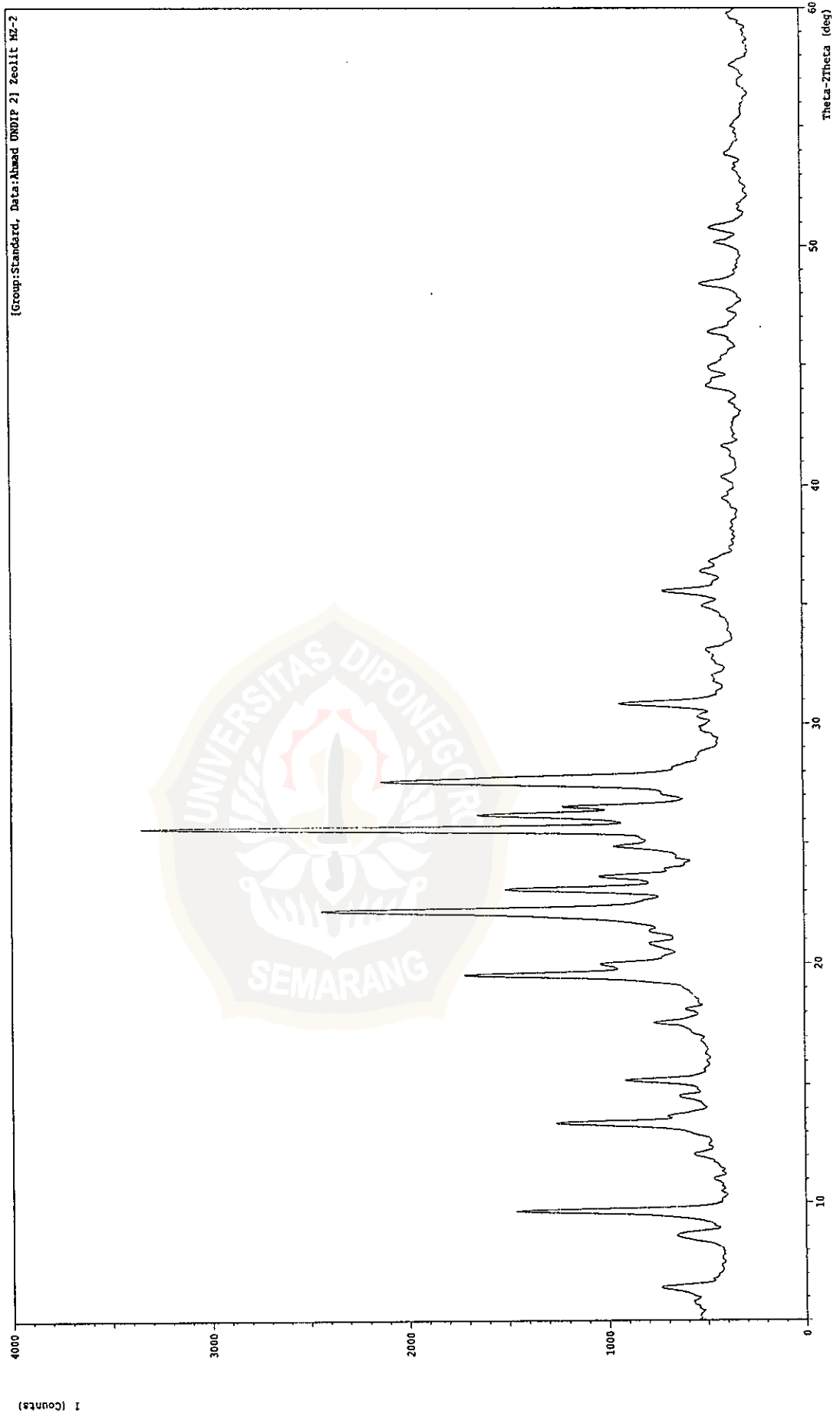
#	Peak Data	List					
peak	2Theta	d	I/I1	FWHM	Intensity	Integrated Int	
no.	(deg)	(A)		(deg)	(Counts)	(Counts)	
1	6.3721	13.85970	9	0.31490	179	3896	
2	8.6016	10.27167	9	0.44320	164	3871	
3	9.3600	9.44104	8	0.22400	148	2050	
4	9.6418	9.16573	37	0.24660	716	9069	
5	12.0376	7.34635	4	0.30870	84	1723	
6	12.8800	6.86770	3	0.16880	60	1111	
7	13.3571	6.62345	28	0.26890	529	6939	
8	13.6800	6.46783	8	0.28720	149	2675	
9	14.5033	6.10247	5	0.24670	97	1632	
10	15.1660	5.83727	15	0.23130	279	3888	
11	17.5641	5.04532	9	0.21830	169	2923	
12	19.2000	4.61897	6	0.15300	120	1483	
13	19.5041	4.54763	40	0.25350	770	10119	
14	19.9600	4.44478	15	0.24500	285	4747	
15	20.2800	4.37536	3	0.17600	64	778	
16	20.7429	4.27875	5	0.30810	95	1473	
17	21.2800	4.17196	4	0.18280	86	971	
18	21.6600	4.09962	7	0.28000	141	2101	
19	21.8800	4.05889	21	0.29140	411	4560	
20	22.1266	4.01421	63	0.29610	1217	15529	
21	22.5800	3.93462	6	0.28000	112	2737	
22	23.0392	3.85723	31	0.24600	596	7943	
23	23.5600	3.77313	15	0.26330	284	4114	
24	23.9000	3.72021	3	0.12660	61	558	
25	24.8428	3.58112	13	0.28780	242	5122	
26	25.5572	3.48262	100	0.21810	1923	23341	
27	26.1480	3.40525	37	0.28890	712	11501	
28	26.5000	3.36081	23	0.19300	435	4707	
29	27.0400	3.29491	5	0.22940	100	1662	
30	27.5400	3.23622	57	0.30540	1095	15168	
31	27.7600	3.21107	33	0.17820	643	7526	
32	28.1600	3.16636	6	0.00000	108	0	
33	28.3000	3.15101	4	0.21100	70	1655	
34	29.6600	3.00955	3	0.11140	61	421	
35	29.8600	2.98985	4	0.17000	68	760	
36	30.3026	2.94718	4	0.29660	75	1282	
37	30.7973	2.90095	19	0.24530	364	5261	
38	32.7000	2.73637	3	0.48620	58	1732	
39	33.0178	2.71076	4	0.35570	80	1342	
40	34.9200	2.56733	5	0.40000	99	1824	
41	35.0600	2.55739	3	0.28000	63	509	
42	35.3000	2.54055	4	0.15700	79	594	
43	35.5224	2.52516	13	0.26770	242	2672	
44	35.8600	2.50215	3	0.39200	60	1283	

peak no.	2Theta (deg)	d (Å)	I/I ₁	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
45	36.3633	2.46867	6	0.32670	109	1692
46	36.8000	2.44037	4	0.28000	80	1476
47	41.6400	2.16721	3	0.18280	62	974
48	44.1000	2.05186	6	0.29600	112	1990
49	44.4000	2.03869	4	0.19720	84	917
50	44.7200	2.02484	5	0.15740	92	599
51	44.9000	2.01714	5	0.32000	92	2126
52	46.3559	1.95712	6	0.24820	112	1995
53	48.3786	1.87991	8	0.29610	152	3029
54	50.1347	1.81810	6	0.22940	112	1564
55	50.7478	1.79757	7	0.30180	129	2339
56	53.8452	1.70124	3	0.26290	66	1663
57	57.5651	1.59984	3	0.27690	67	1460
58	59.7240	1.54706	4	0.39200	69	1761



*** Multi Plot ***

File Name : Standard\Ahmad UNDIP 2
 Sample Name : Zeolit MZ-2
 Date & Time : 03-13-03 11:02:39
 Condition
 X-ray Tube : Cu(1.54060 A) Voltage : 40.0 kV Current : 30.0 mA
 Scan Range : 2.5000 <-> 60.0000 deg Step Size : 0.0200 deg
 Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm
 Comment : Zeolit MZ-2



# Strongest 3 peaks							
no.	peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
1	24	25.5820	3.47930	100	0.22120	1897	24059
2	19	22.1539	4.00932	65	0.29010	1228	18377
3	28	27.6082	3.22838	57	0.40620	1078	22165

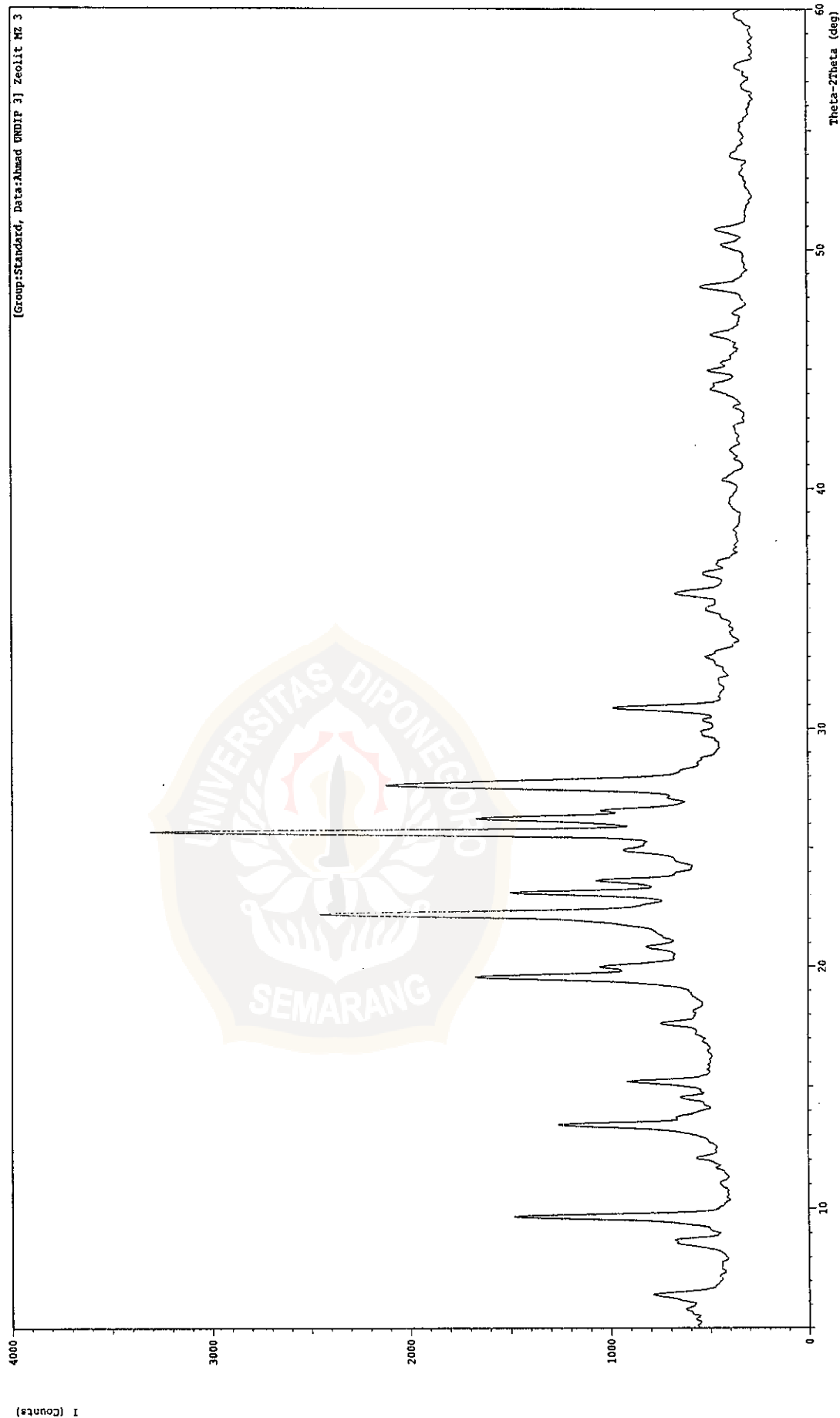
# Peak Data List							
peak no.	2Theta (deg)	d (A)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)	
1	5.8200	15.17317	4	0.48800	77	1806	
2	6.2000	14.24403	6	0.26220	110	1268	
3	6.4200	13.75640	11	0.25340	209	2560	
4	8.6193	10.25062	9	0.40450	178	4390	
5	9.3600	9.44104	7	0.19000	137	1887	
6	9.6601	9.14841	38	0.25040	720	9582	
7	12.0694	7.32707	5	0.21610	93	1704	
8	13.3795	6.61241	28	0.26740	532	7934	
9	13.7000	6.45843	7	0.33340	131	2638	
10	14.5042	6.10210	6	0.22090	105	1566	
11	15.1690	5.83613	15	0.23500	283	4018	
12	17.5949	5.03655	8	0.25870	152	3255	
13	19.2200	4.61421	6	0.19700	123	2061	
14	19.5248	4.54286	39	0.28490	732	9794	
15	19.9400	4.44919	15	0.30620	291	5302	
16	20.7850	4.27018	6	0.23660	109	1519	
17	21.3600	4.15651	3	0.41820	62	1336	
18	21.7000	4.09215	9	0.26340	171	3458	
19	22.1539	4.00932	65	0.29010	1228	18377	
20	22.6000	3.93118	6	0.22000	121	2371	
21	23.0673	3.85259	32	0.24010	604	7926	
22	23.5778	3.77032	17	0.25880	327	5024	
23	24.8400	3.58152	12	0.27500	229	5495	
24	25.5820	3.47930	100	0.22120	1897	24059	
25	26.1707	3.40235	39	0.30060	747	11817	
26	26.5200	3.35833	17	0.24200	319	4380	
27	27.0600	3.29252	5	0.21880	88	1474	
28	27.6082	3.22838	57	0.40620	1078	22165	
29	28.2200	3.15976	5	0.24500	93	2668	
30	29.7000	3.00559	3	0.16400	65	581	
31	29.8600	2.98985	4	0.15080	68	561	
32	30.3182	2.94570	3	0.20640	61	977	
33	30.8219	2.89869	21	0.24380	392	5348	
34	32.9266	2.71806	5	0.29330	92	1613	
35	33.1800	2.69787	3	0.19600	57	575	
36	34.9413	2.56581	5	0.37510	96	2553	
37	35.5826	2.52102	11	0.36120	206	4018	
38	36.3992	2.46632	6	0.30380	106	1870	
39	36.8522	2.43703	3	0.34180	63	1122	
40	40.3471	2.23363	4	0.21430	78	1516	
41	43.9400	2.05896	3	0.17720	62	784	
42	44.1600	2.04921	6	0.33500	120	1442	
43	44.4000	2.03869	5	0.15380	101	851	
44	44.9116	2.01665	7	0.20980	126	1483	

peak no.	2Theta (deg)	d (Å)	I/I1	FWHM (deg)	Intensity (Counts)	Integrated Int (Counts)
45	45.2316	2.00312	4	0.23130	72	1240
46	46.4109	1.95493	6	0.25530	114	2122
47	48.4066	1.87889	9	0.28990	168	2863
48	50.1290	1.81830	5	0.30530	86	1513
49	50.8034	1.79573	6	0.31580	114	1904
50	53.9144	1.69922	4	0.24120	82	1741
51	57.5826	1.59939	4	0.23030	73	1418
52	59.7402	1.54668	3	0.39160	64	1495



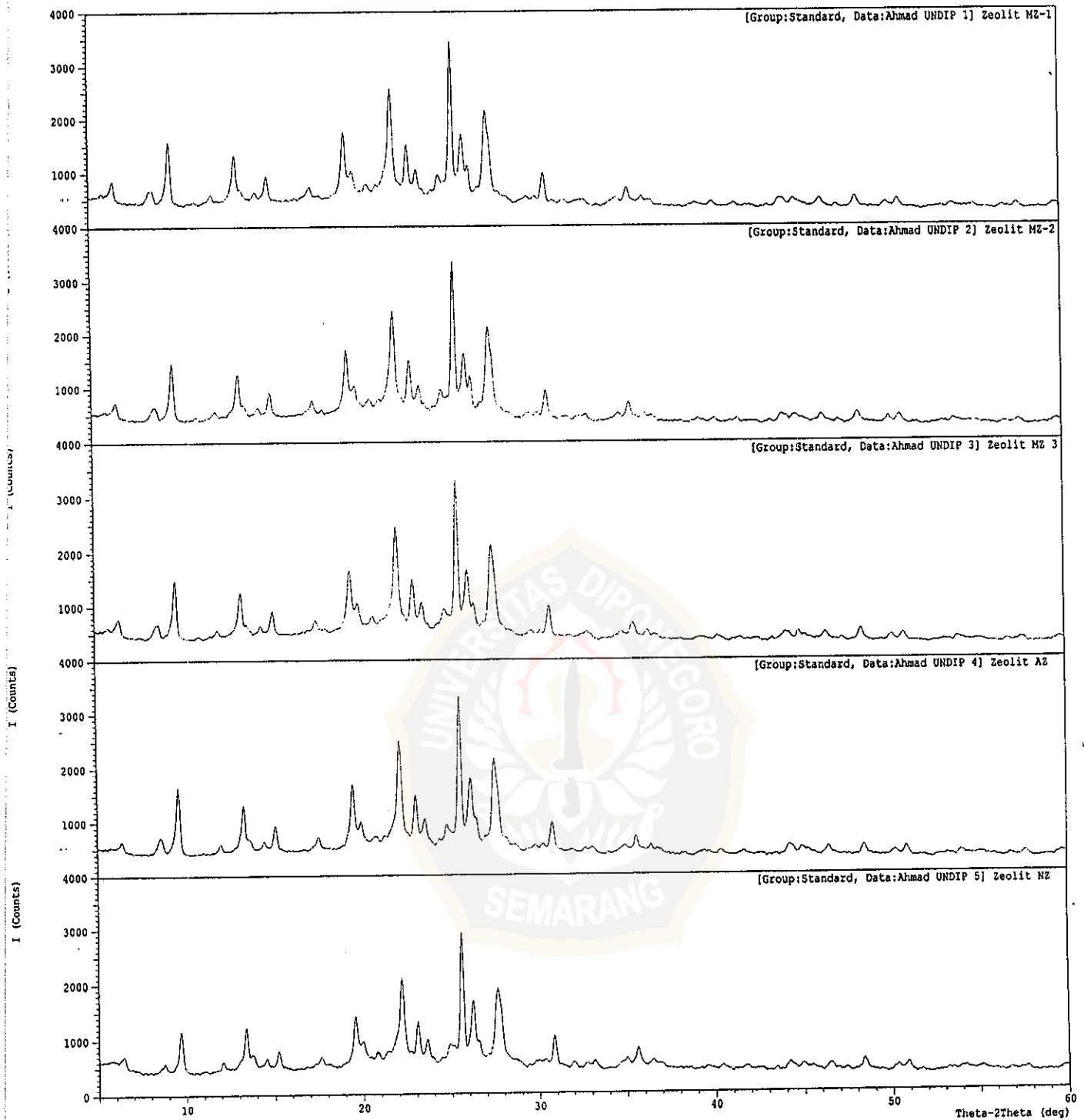
*** Multi Plot ***

File Name : Standard\Ahmad UNDIP 3
Sample Name : Zeolit MZ 3
Date & Time : 03-13-03 12:58:25
Comment : Zeolit MZ 3
Condition
X-ray Tube : Cu(1.54060 Å) Voltage : 40.0 kV Current : 30.0 mA
Scan Range : 5.0000 <-> 60.0000 deg Step Size : 0.0200 deg
Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm



Condition

X-ray Tube : Cu(1.54060 Å) Voltage : 40.0 kV Current : 30.0 mA
 Scan Range : 2.5000 <-> 60.0000 deg Step Size : 0.0200 deg
 Count Time : 0.24 sec Slit DS : 1.00 deg SS : 1.00 deg RS : 0.30 mm



Standard\Ahmad UNDIP 1	Zeolit MZ-1	Cont.Scan	5.0 deg/min	0.24 sec	0.
Standard\Ahmad UNDIP 2	Zeolit MZ-2	Cont.Scan	5.0 deg/min	0.24 sec	0.
Standard\Ahmad UNDIP 3	Zeolit MZ 3	Cont.Scan	5.0 deg/min	0.24 sec	0.
Standard\Ahmad UNDIP 4	Zeolit AZ	Cont.Scan	5.0 deg/min	0.24 sec	0.