

XRD ANALYSES

NOPAL I DEPOSIT

0 LEVEL

CHIHUAHUA, MEXICO

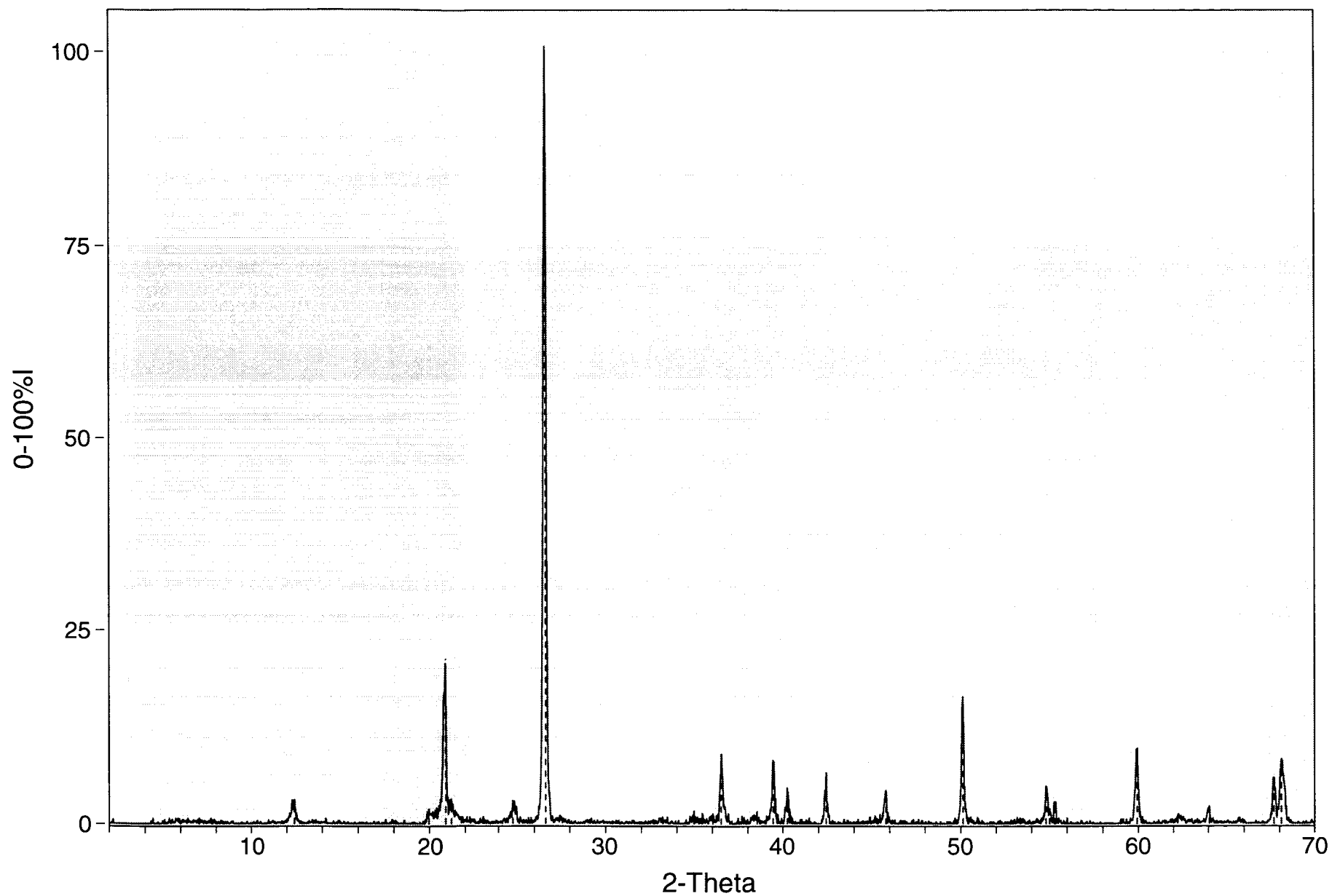
E-W Inverse

ID: 1/7/94 - NOPI-254-XRD1

File: NOPI2541.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

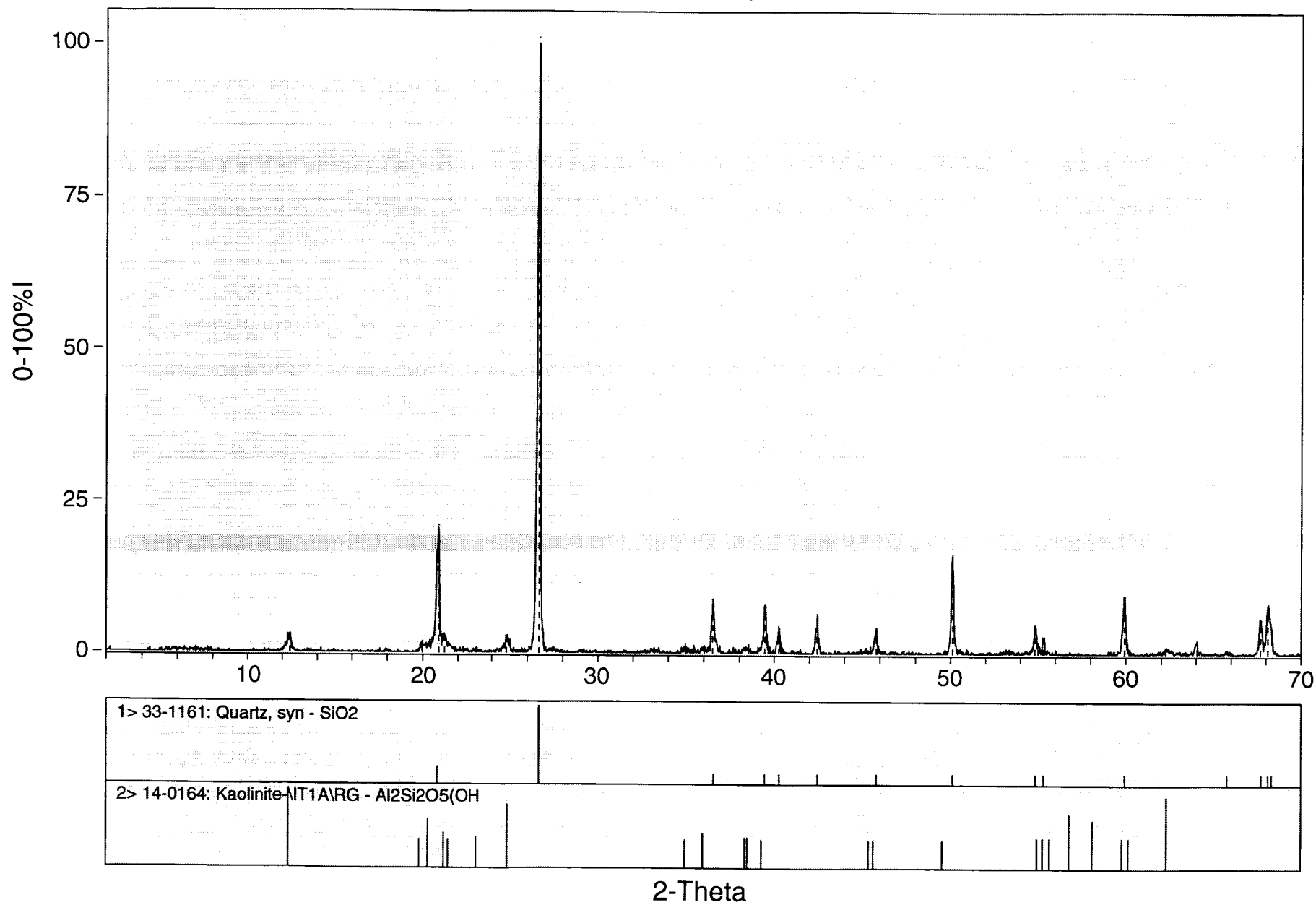


ID: 1/7/94 - NOPI-254-XRD1

File: NOPI2541.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2541.MDI> 1/7/94 - NOPI-254-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598          || Filter length(pts) = 25
Scan Range = 2 - 70              || Noise level(sigmas) = 2.0
Step Size  = .02                 || Intensity cutoff(%) = .5-100
Count Time = 1 sec.              || 2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.035	12.5543	7.033	12.5584	1	11	0.9	152	1.2	0.249
2:	12.429	7.1161	12.377	7.1458	1	44	3.5	531	4.3	0.217
3:	19.969	4.4429	20.020	4.4315	1	30	2.4	338	2.7	0.203
4:	20.905	4.2460	20.874	4.2522	1	271	21.5	4033	32.6	0.268
5:	21.227	4.1823	21.209	4.1858	2	42	3.3	448	3.6	0.192
6:	23.108	3.8459	23.102	3.8469	1	15	1.2	82	0.7	0.098
7:	24.788	3.5888	24.809	3.5860	1	43	3.4	561	4.5	0.235
8:	26.644	3.3429	26.621	3.3458	11	1261	100.0	12372	100.0	0.177
9:	33.204	2.6960	33.191	2.6970	1	13	1.0	141	1.1	0.195
10:	34.964	2.5642	34.961	2.5644	1	22	1.7	157	1.3	0.128
11:	35.442	2.5307	35.427	2.5318	1	17	1.3	452	3.7	0.479
12:	36.022	2.4913	36.018	2.4915	1	16	1.3	548	4.4	0.616
13:	36.503	2.4595	36.518	2.4586	1	114	9.0	1318	10.7	0.208
14:	38.520	2.3353	38.491	2.3370	1	20	1.6	150	1.2	0.135
15:	39.442	2.2828	39.443	2.2827	1	103	8.2	937	7.6	0.164
16:	40.241	2.2393	40.246	2.2390	1	58	4.6	516	4.2	0.160
17:	42.439	2.1283	42.414	2.1295	1	81	6.4	643	5.2	0.143
18:	45.778	1.9805	45.751	1.9816	1	53	4.2	553	4.5	0.188
19:	50.117	1.8187	50.110	1.8189	1	208	16.5	1849	14.9	0.160
20:	53.357	1.7157	53.368	1.7153	1	11	0.9	126	1.0	0.206
21:	54.818	1.6733	54.854	1.6723	1	61	4.8	820	6.6	0.242
22:	55.017	1.6677	55.020	1.6677	4	22	1.7	108	0.9	0.088
23:	55.279	1.6605	55.254	1.6611	1	38	3.0	444	3.6	0.210
24:	55.353	1.6584	55.345	1.6586	4	35	2.8	143	1.2	0.074
25:	59.933	1.5422	59.911	1.5427	1	127	10.1	1287	10.4	0.182
26:	62.236	1.4905	62.283	1.4895	1	15	1.2	273	2.2	0.328
27:	64.048	1.4526	64.012	1.4534	1	29	2.3	312	2.5	0.194
28:	67.692	1.3830	67.705	1.3828	1	75	5.9	862	7.0	0.207
29:	68.113	1.3755	68.136	1.3751	1	108	8.6	1686	13.6	0.281

* Intensity values are based on counts per second.

NOPI2541.MDI> 1/7/94 - NOPI-254-XRD1

Estimated %Unknown Matched by the List = 85%

40 Hits Sorted on Most-Likelihood			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
() Quartz, syn - SiO ₂	+	33-1161	0.4	-0.02	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649		
2>(1) Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	3.8	0.04	0		Pcab (61)	11.19	13.06	10.89	1591	8	1.921		
3>() Microcline, ordered - KAlSi ₃ O ₈	+	19- 926	7.1	-0.10	0		P-1 (2)	7.62	7.92	7.22	361	2	2.561		
4>(1) Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	6.4	0.00	0		Pcab (61)	11.18	13.06	10.89	1589	8	1.924		
5>() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	7.1	-0.10	0		P21/m (11)	7.35	25.23	6.10	1126	4	2.065		
6>() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	8.4	-0.02	0		P21/c (14)	10.02	10.61	9.84	1046	4	2.224		
7>() Potassium alum, syn - KAl(SO ₄) ₂ ·12H ₂ O	+	7- 17	10.3	0.10	0		Pa3 (205)	12.16	12.16	12.16	1797	4	1.754		
8>(2) Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH)	+	34- 170	9.5	0.10	0	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602		
9>() Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH)	+	14- 164	9.2	0.08	0		P-1 (2)	7.41	8.96	5.16	330	2	2.595		
10>() Gismondine - MnO ₂	+	42-1316	12.0	-0.14	0	3.0	Pbnc (62)	4.70	9.53	2.86	128	4	4.501		
11>(2) Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH)	+	16- 606	10.3	0.08	0		Aa (9)	14.61	5.15	8.91	329	4	2.602		
12>() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH)·6H ₂ O	+	20- 226	10.6	-0.02	0		P-62c (190)	8.56	8.56	10.76	683	2	2.546		
13>() Gatumbaite - CaAl ₂ (PO ₄) ₂ (OH)·2H ₂ O	+	29- 283	11.8	0.06	0		P*/ (10)	10.76	5.09	6.91	379	2	2.946		
14>(3) Misenite - K ₈ (SO ₄)(SO ₃ OH) ₆	?	41-1363	10.0	-0.06	0			22.74	7.10	8.71	1389		2.320		
15>() Sapphirine-IT2M\RG - (Mg ₄ Al ₄)(Al ₄ Si ₄ O ₂₀)	+	19- 750	12.0	-0.06	0	3.5	P21/c (14)	9.94	14.43	9.79	1317	4	3.476		
16>() Hetaerolite, syn - ZnMn ₂ O ₄	+	24-1133	16.3	0.10	0	2.7	I41/amd (141)	5.72	5.72	9.24	151	4	5.253		
17>() Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH)	+	10- 446	13.7	0.02	0		Aa (9)	14.42	8.95	5.15	330	4	2.599		
18>(3) Bilinite - FeFe ₂ (SO ₄) ₄ ·22H ₂ O	+	25-1153	12.7	0.14	0		P21/n (14)	21.05	24.33	6.21	3159	4	1.993		
19>(4) Goslarite, syn - ZnSO ₄ ·7H ₂ O	+	9- 395	14.4	-0.14	0		P212121 (19)	11.78	12.05	6.82	968	4	1.972		
20>(4) Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	17.8	-0.10	0		P212121 (19)	11.87	11.98	6.85	974	4	1.681		
21>() Baumite-IT1T\RG [NR] - (Mg,Mn,F)	+	29- 704	13.9	0.12	0		P31m (157)	5.36	5.36	7.19	179	1	2.900		
22>() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	18.4	-0.04	0		Pmnb (62)	5.98	10.20	4.76	290	4	3.222		
23>() Amesite-IT2H\RG - (Mg,Al) ₃ Si ₄ O ₁₀	+	34- 163	17.0	-0.14	0	1.0	P1 (1)	5.32	14.06	5.32	344	2			
24>() Kehoeite [NR] - (Zn,Ca)Al ₂ P ₂ H ₆ O ₁₁	+	27- 94	14.6	0.06	0		P ()	13.45	13.45	13.45	2433	8	2.340		
25>() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆	+	19- 231	14.7	-0.02	0								2.590		
26>() McGovernite - Mn ₉ Mg ₄ Zn ₂ As ₂ Si ₂ O ₁₇	?	25- 531	13.0	-0.02	0		R ()	8.22	8.22	18.70	365	2	3.646		
27>() Orthochrysotile-IT2O#c#1\RG - M	+	22-1162	18.1	-0.10	0		Bm21b (36)	9.25	14.20	5.34	351	4	2.624		
28>() Heterosite - (Fe,Mn)PO ₄	+	34- 134	17.0	-0.08	0		Pmnb (62)	5.82	9.82	4.79	274	4	3.400		
29>() Foggite - CaAl(PO ₄)(OH)·2H ₂ O	+	29- 282	15.7	-0.10	0		A2122 (20)	9.27	21.32	5.19	513	8	2.772		
30>() Argentopyrite - AgFe ₂ S ₃	+	38- 459	17.5	-0.10	0		Pmmn (59)	6.64	11.46	6.45	491	4	4.271		
31>() Kaolinite-IT1Md\RG - Al ₂ Si ₂ O ₅ (OH)	+	29-1488	16.3	-0.10	0		A*/ (12)	7.39	8.93	5.16	165	2	2.601		
32>() Wollastonite-IT1A\RG - CaSiO ₃	+	27-1064	16.3	-0.14	0		P-1 (2)	7.33	7.93	7.07	399	6	2.903		
33>() Kamaishilite - Ca ₂ Al ₂ Si ₂ O ₆ (OH) ₂	+	35- 673	17.8	0.14	0		I ()	8.85	8.85	8.77	343	4	2.826		
() Carlosturanite - Mg ₂ Si ₂ O ₇ (OH)	+	38- 404	17.0	0.10	0		Im (8)	36.01	9.41	7.29	1235	1	1.271		
() Clinocllore-IT1M#I#I#b\RG, ferr	+	7- 78	18.4	-0.14	0		A2/m (12)	14.07	9.19	5.31	340	2	2.960		
36>(5) Manganpyrosomalite - (Mn,Fe) ₈ (Si ₆)	+	12- 249	18.6	-0.04	0		P-3m1 (164)	13.36	13.36	7.16	1107	2	3.130		
37>() Pyrochroite, syn - Mn(OH) ₂	+	18- 787	18.6	-0.10	0		P-3m1 (164)	3.32	3.32	4.74	45	1	3.274		
38>(5) Schallerite - (Mn,Mg,Fe) ₈ (Si,As)	+	12- 248	19.1	0.10	0		P ()	13.43	13.43	14.31	2235	4	3.339		
39>() Hisingerite - Fe ₂ Si ₂ O ₅ (OH)·4H ₂ O	?	26-1140	18.4	-0.10	0		P ()	14.99	9.03	5.40	723	4	3.232		
40>(3) Variscite-2\ITO\RG - AlPO ₄ ·2H ₂ O	?	25- 18	19.6	0.14	0		Pbca (61)	9.90	17.18	9.66	1643	16	2.555		

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

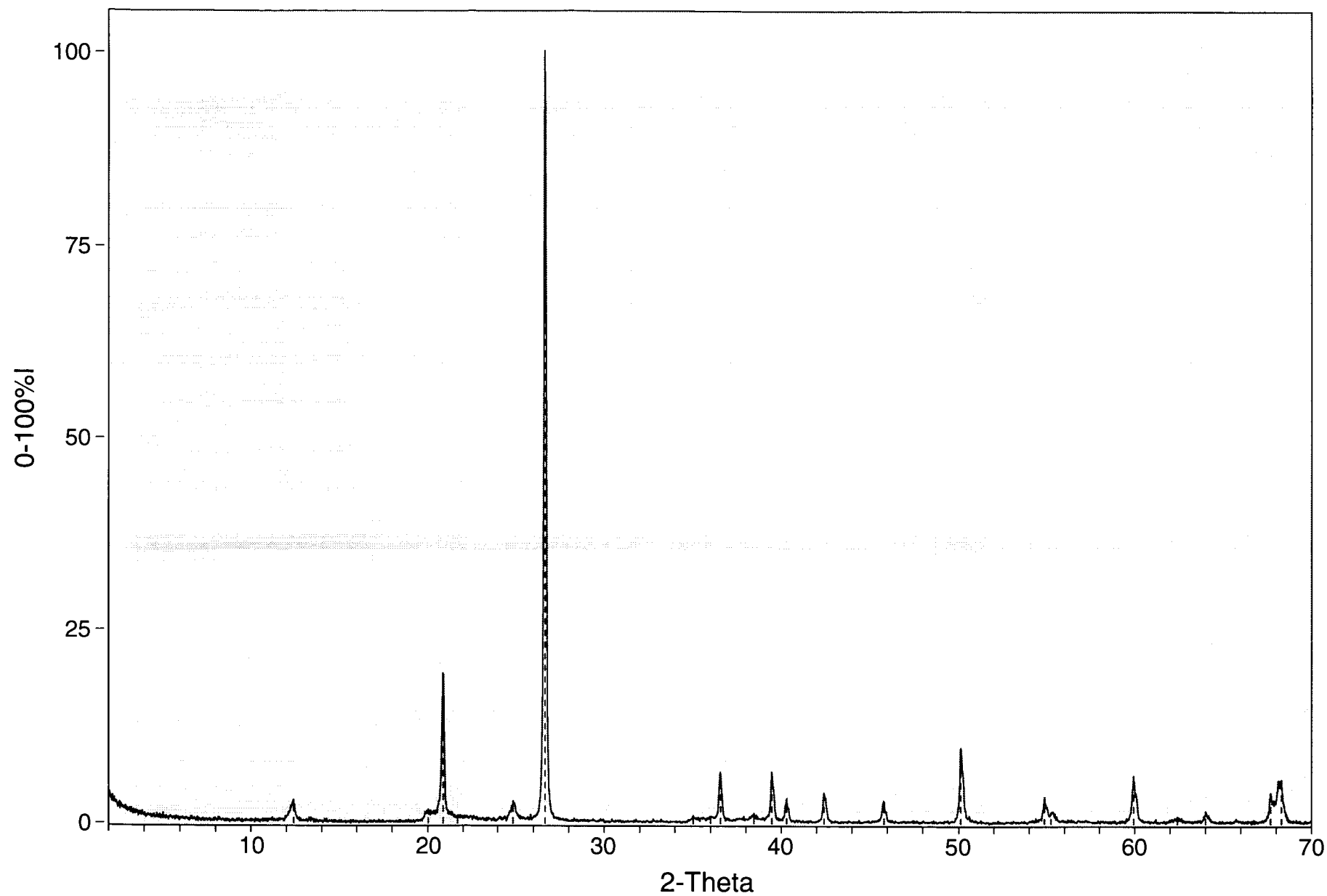
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/13/94 - NOPI-255-XRD1

File: NOPI2551.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

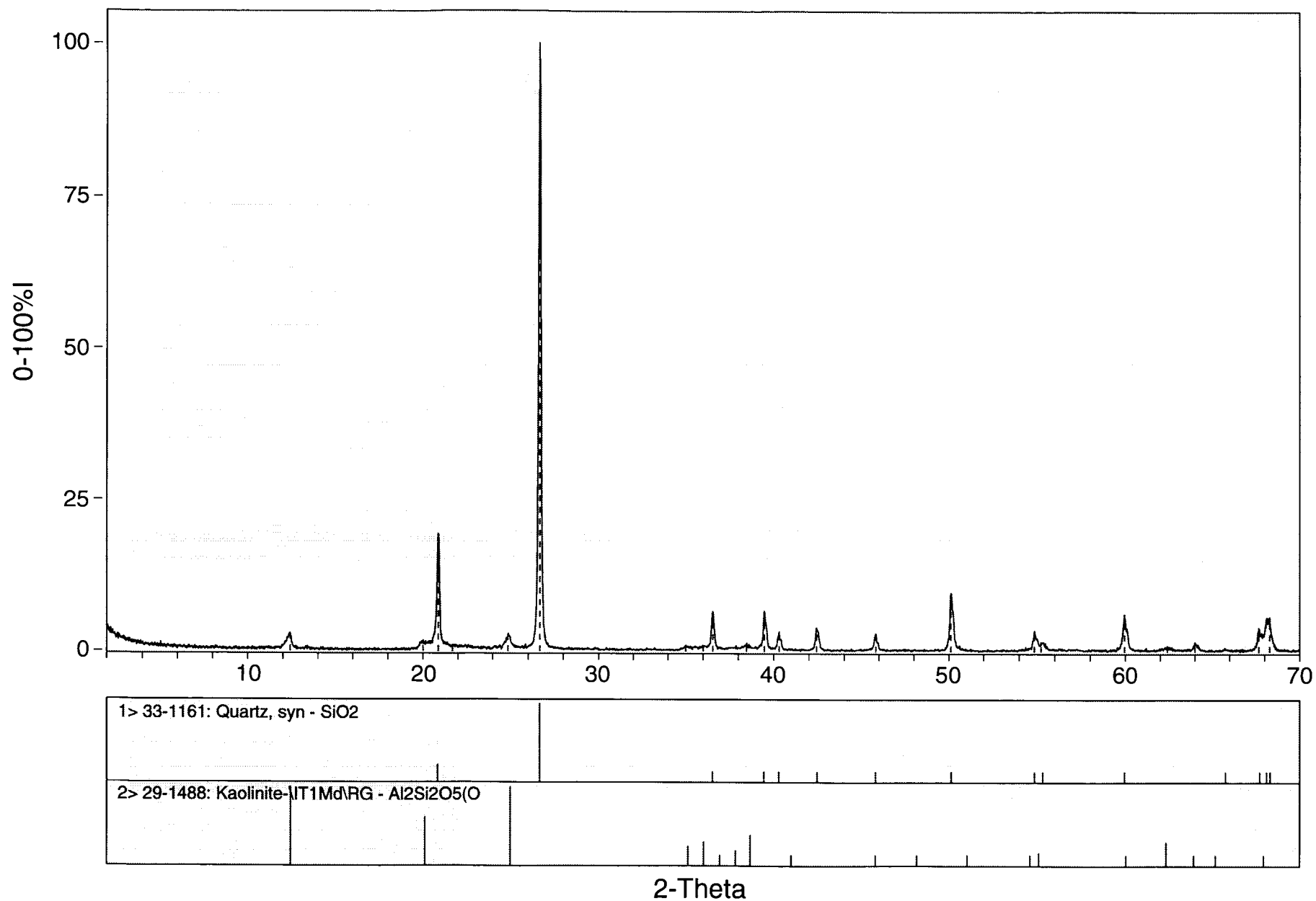


ID: 1/13/94 - NOPI-255-XRD1

File: NOPI2551.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Fri Jan 14 1994 @3:32pm

File: NOPI2551.MDI> 1/13/94 - NOPI-255-XRD1

----- Scan Parameters: -----
 Radiation = CU_1.540598
 Scan Range = 2 - 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----
 Filter length(pts) = 25
 Noise level(sigmas) = 2.0
 Intensity cutoff(%) = .5-100
 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.398	7.1333	12.356	7.1578	7	74	2.8	1328	5.3	0.323
2:	20.017	4.4322	20.032	4.4289	9	42	1.6	926	3.7	0.397
3:	20.876	4.2517	20.858	4.2555	10	512	19.1	6883	27.2	0.242
4:	21.677	4.0964	21.649	4.1016	13	18	0.7	401	1.6	0.401
5:	24.857	3.5791	24.861	3.5785	13	66	2.5	1083	4.3	0.295
6:	26.655	3.3416	26.653	3.3418	13	2680	100.0	25281	100.0	0.170
7:	35.013	2.5607	35.025	2.5598	9	21	0.8	222	0.9	0.190
8:	35.993	2.4932	36.014	2.4918	8	20	0.7	947	3.7	0.852
9:	36.571	2.4551	36.557	2.4560	10	172	6.4	1773	7.0	0.186
10:	38.450	2.3393	38.448	2.3395	12	27	1.0	339	1.3	0.226
11:	39.473	2.2811	39.488	2.2802	11	169	6.3	1842	7.3	0.196
12:	40.292	2.2366	40.303	2.2359	12	80	3.0	750	3.0	0.169
13:	42.432	2.1286	42.459	2.1273	6	101	3.8	1219	4.8	0.217
14:	45.808	1.9792	45.803	1.9794	5	76	2.8	920	3.6	0.218
15:	50.110	1.8189	50.149	1.8176	4	274	10.2	3434	13.6	0.226
16:	54.847	1.6725	54.886	1.6714	6	88	3.3	1792	7.1	0.367
17:	55.228	1.6619	55.218	1.6622	6	40	1.5	1040	4.1	0.468
18:	59.945	1.5419	59.968	1.5414	6	165	6.2	2357	9.3	0.257
19:	62.422	1.4865	62.421	1.4865	7	21	0.8	305	1.2	0.261
20:	64.003	1.4535	64.022	1.4532	6	41	1.5	407	1.6	0.179
21:	67.683	1.3832	67.743	1.3821	6	103	3.8	1976	7.8	0.345
22:	68.299	1.3722	68.245	1.3732	5	149	5.6	4285	16.9	0.518

* Intensity values are based on counts per second.

NOPI2551.MDI> 1/13/94 - NOPI-255-XRD1

31 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	()	Quartz, syn - SiO2	+	33-1161	0.4	0.00	92	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.9	0.06	64		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	()	Moganite [NR] - SiO2		38- 360	6.4	-0.06	91		I ()	8.53	10.76	4.93	226	12	2.645
4>	()	Kehoeite [NR] - (Zn,Ca)Al2P2H6O1		27- 94	11.0	0.00	51		P ()	13.45	13.45	13.45	2433	8	2.340
5>	()	Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	14.1	-0.06	66		P-62c (190)	8.56	8.56	10.76	683	2	2.546
6>	()	Argentopyrite - AgFe2S3	+	38- 459	15.9	-0.06	32		Pmmn (59)	6.64	11.46	6.45	491	4	4.271
7>	()	Barboselite - FeFe2(PO4)2(OH)2	+	33- 668	25.2	0.06	37		P21/n (14)	7.40	7.49	7.31	356	2	3.652
8>	()	Sanidine, disordered - K(Si3Al)O	+	25- 618	28.1	-0.06	91		I2/m (12)	8.45	13.03	7.18	362	4	2.556
9>	()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	32.5	0.06	18		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
10>	()	Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	35.6	-0.06	3		A*/* (12)	7.39	8.93	5.16	165	2	2.601
11>	()	Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	16- 606	35.6	0.06	3		Aa (9)	14.61	5.15	8.91	329	4	2.602
12>	()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	37.4	0.00	17		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
13>	()	Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10- 446	43.6	0.00	3		Aa (9)	14.42	8.95	5.15	330	4	2.599
14>	()	Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	34- 170	43.6	0.06	3	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
15>	()	Clinocllore-IT1M#I#b\RG, ferroa		16- 351	47.4	-0.06	2		A2/m (12)	14.35	9.29	5.32	352	2	2.920
16>	()	Carlosturanite - Mg2Si11O28(OH)		38- 404	47.4	0.00	2		Im (8)	36.01	9.41	7.29	1235	1	1.271
17>	()	Alamosite - PbSiO3		29- 782	49.3	-0.06	66		Pn (7)	12.25	7.06	11.24	893	12	6.319
18>	()	Schallerite - (Mn,Mg,Fe)8(Si,As)		12- 248	49.6	0.06	2		P ()	13.43	13.43	14.31	2235	4	3.339
19>	()	Cronstedtite-IT1M\RG - Fe3(Si,F	+	17- 470	51.2	-0.06	3		Am (8)	7.32	9.51	5.49	185	2	3.340
20>	()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	53.1	-0.06	7		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
21>	()	Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	53.1	-0.06	6								2.590
22>	()	Fourmarierite - PbU4O13·4H2O	+	13- 116	53.1	0.06	3		B**b (63)	14.39	16.47	14.00	1659	8	5.763
23>	()	Clinocllore-IT1M#I#a\RG, ferroa		16- 362	55.0	-0.06	3		A2/m (12)	14.20	9.29	5.32	348	2	
24>	()	Althausite - Mg2PO4(OH)	+	29- 869	55.0	0.06	2		Pna21 (33)	8.26	14.38	6.05	719	8	2.967
25>	()	Gatumbaite - CaAl2(PO4)2(OH)2·H2	+	29- 283	56.9	0.06	3		P*/* (10)	10.76	5.09	6.91	379	2	2.946
26>	()	Pennantite-1ITM#I#a\RG - (Mn5Al		29- 884	56.9	0.00	2		A2/m (12)	14.40	9.50	5.45	370	2	3.184
27>	()	Zinc-zippeite, syn - Zn2(UO2)6(S		29-1395	58.8	0.00	2								3.300
28>	()	Epsomite, syn - MgSO4·7H2O	+	36- 419	60.7	-0.06	5		P212121 (19)	11.87	11.98	6.85	974	4	1.681
29>	()	Amesite-IT2H\RG, ferroan - (Mg,		37- 429	62.6	-0.06	2		P1 (1)	5.37	14.12	5.37	353	2	
30>	()	Natronambulite - NaMn4Si5O14(OH)	+	39- 332	62.6	-0.06	2		P*, -1 (2)	7.62	11.76	6.74	574	2	3.609
31>	()	Heterosite - (Fe,Mn)PO4	+	34- 134	64.5	-0.06	6		Pmnb (62)	5.82	9.82	4.79	274	4	3.400

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

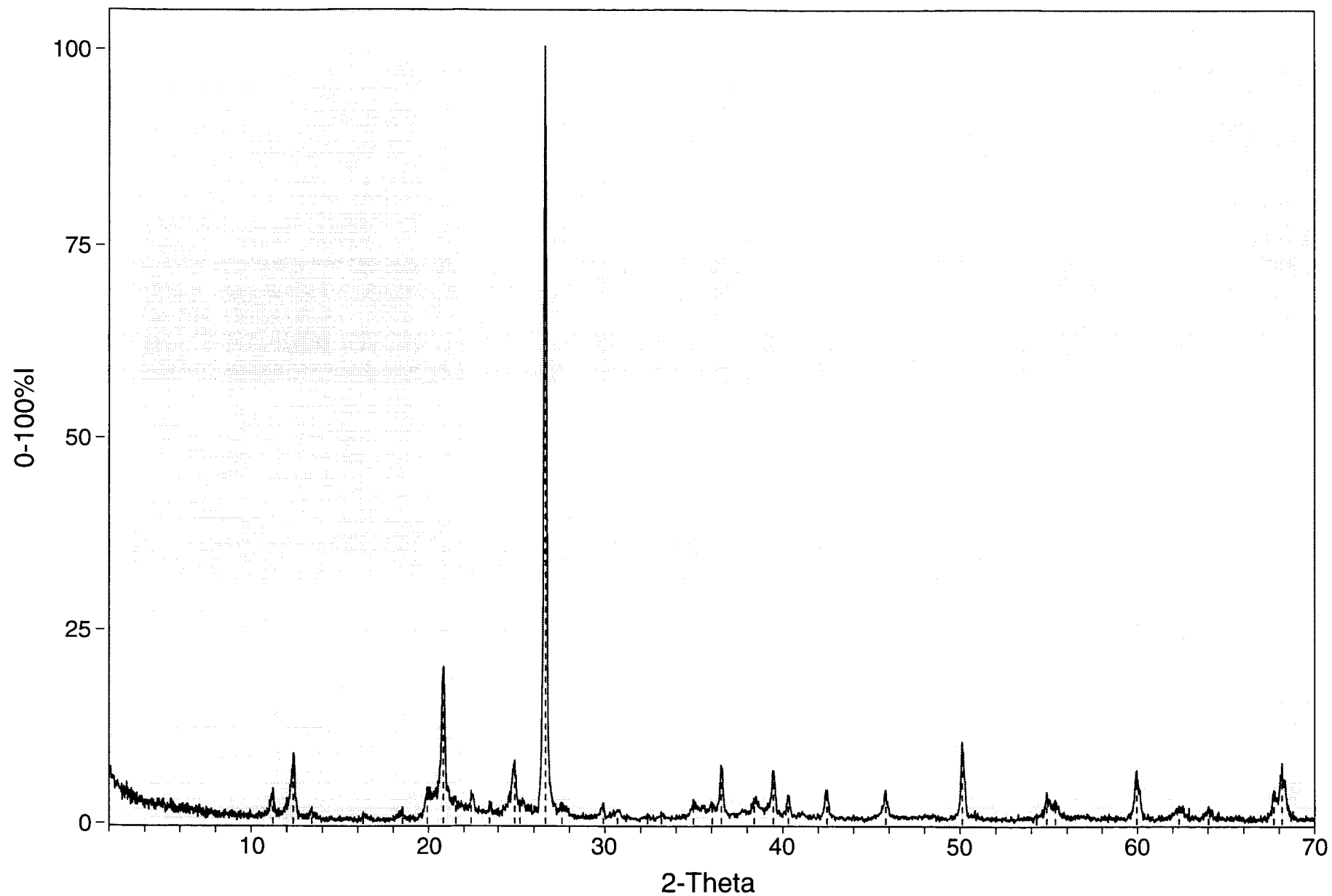
* l - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/13/94 - NOPI-256-XRD1

File: NOPI2561.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

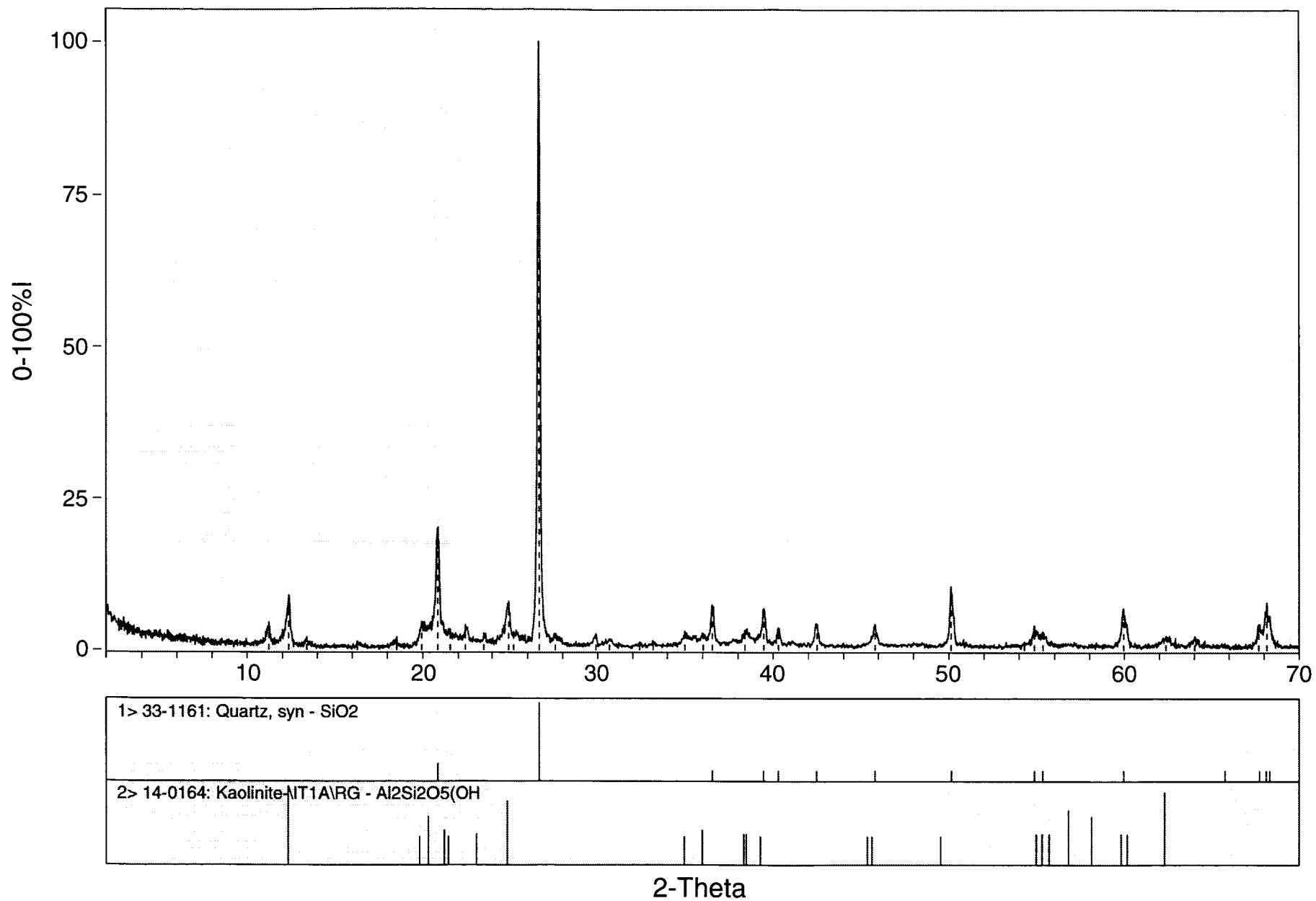


ID: 1/13/94 - NOPI-256-XRD1

File: NOPI2561.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

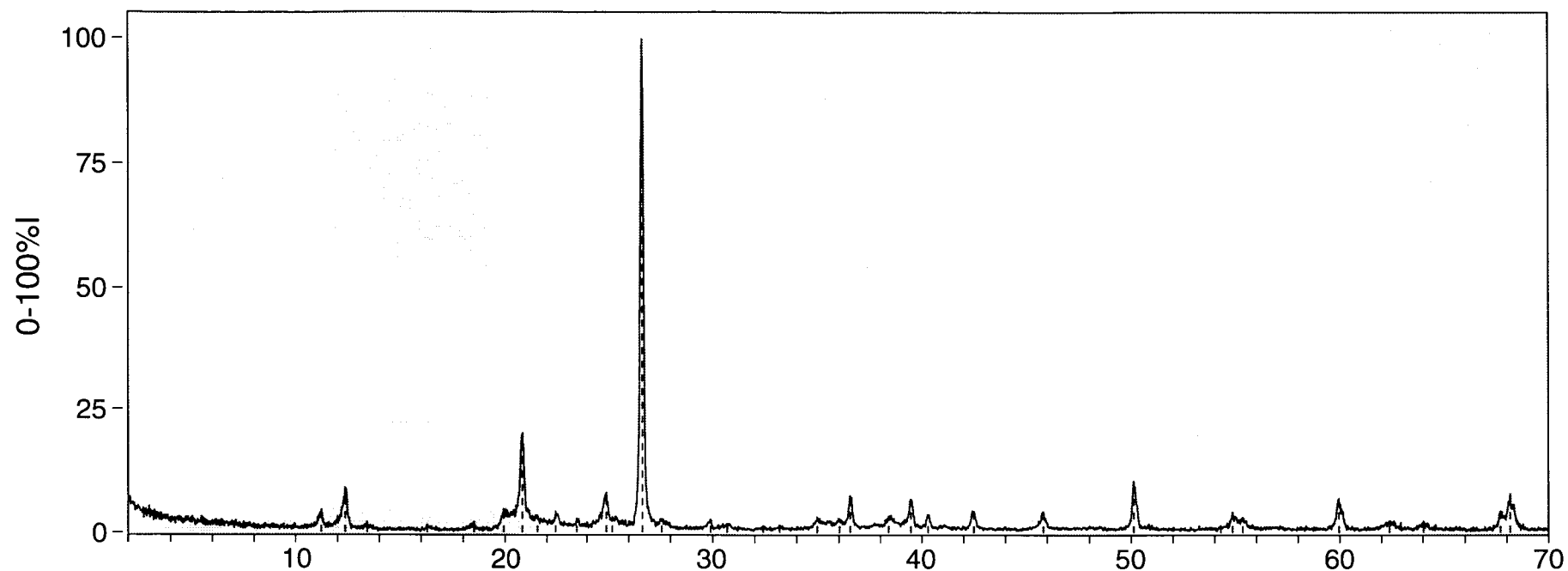


ID: 1/13/94 - NOPI-256-XRD1

File: NOPI2561.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



1> 33-1161: Quartz, syn - SiO ₂	
2> 14-0164: Kaolinite-NT1A\RG - Al ₂ Si ₂ O ₅ (OH)	
3> 33-1161: Quartz, syn - SiO ₂	
4> 14-0164: Kaolinite-NT1A\RG - Al ₂ Si ₂ O ₅ (OH)	
5> 39-1360: Uranophane - Ca(UO ₂) ₂ (SiO ₃ OH) ₂ ·5H ₂ O	

2-Theta

File: NOPI2561.MDI> 1/13/94 - NOPI-256-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598

Scan Range = 2 - 70

Step Size = .02

Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25

Noise level(sigmas) = 2.0

Intensity cutoff(%) = .5-100

2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.220	7.8799	11.198	7.8949	11	54	3.9	562	3.9	0.187
2:	12.361	7.1548	12.336	7.1691	10	117	8.4	1827	12.8	0.281
3:	13.401	6.6020	13.401	6.6021	9	22	1.6	161	1.1	0.132
4:	16.285	5.4387	16.305	5.4318	5	16	1.1	141	1.0	0.159
5:	18.522	4.7865	18.501	4.7918	6	27	1.9	193	1.4	0.129
6:	19.925	4.4525	19.970	4.4426	12	58	4.2	1421	10.0	0.441
7:	20.844	4.2582	20.835	4.2600	13	271	19.4	6463	45.4	0.429
8:	21.543	4.1216	21.523	4.1255	17	34	2.4	1287	9.0	0.681
9:	22.429	3.9608	22.444	3.9582	26	39	2.8	219	1.5	0.101
10:	23.527	3.7784	23.531	3.7777	18	23	1.6	112	0.8	0.088
11:	24.924	3.5697	24.888	3.5747	19	96	6.9	1833	12.9	0.344
12:	25.208	3.5301	25.204	3.5305	20	29	2.1	502	3.5	0.312
13:	26.645	3.3428	26.634	3.3442	19	1395	100.0	14230	100.0	0.184
14:	27.567	3.2331	27.576	3.2321	14	27	1.9	346	2.4	0.231
15:	29.904	2.9855	29.879	2.9879	8	35	2.5	291	2.0	0.150
16:	30.689	2.9109	30.686	2.9112	8	20	1.4	357	2.5	0.321
17:	32.408	2.7604	32.406	2.7605	7	14	1.0	78	0.5	0.100
18:	33.169	2.6987	33.176	2.6982	9	20	1.4	95	0.7	0.085
19:	34.989	2.5624	35.019	2.5603	11	37	2.7	558	3.9	0.271
20:	36.029	2.4908	36.035	2.4904	12	33	2.4	1269	8.9	0.692
21:	36.531	2.4577	36.535	2.4575	13	92	6.6	1166	8.2	0.228
22:	38.391	2.3428	38.430	2.3405	14	40	2.9	612	4.3	0.275
23:	39.470	2.2812	39.456	2.2820	13	87	6.2	1093	7.7	0.226
24:	40.292	2.2366	40.294	2.2364	14	39	2.8	393	2.8	0.181
25:	42.489	2.1258	42.467	2.1269	10	57	4.1	668	4.7	0.211
26:	45.812	1.9791	45.793	1.9799	8	54	3.9	827	5.8	0.276
27:	50.115	1.8188	50.145	1.8177	8	143	10.3	1828	12.8	0.230
28:	54.295	1.6882	54.303	1.6880	8	13	0.9	92	0.6	0.127
29:	54.856	1.6723	54.897	1.6711	9	49	3.5	1341	9.4	0.493
30:	55.335	1.6589	55.308	1.6596	9	39	2.8	1226	8.6	0.566
31:	59.956	1.5416	59.967	1.5414	7	92	6.6	1537	10.8	0.301
32:	62.378	1.4875	62.381	1.4874	7	29	2.1	749	5.3	0.465
33:	64.019	1.4532	64.032	1.4530	7	26	1.9	428	3.0	0.296
34:	67.701	1.3829	67.751	1.3820	6	55	3.9	1386	9.7	0.454
35:	68.159	1.3747	68.167	1.3745	7	104	7.5	2559	18.0	0.443

* Intensity values are based on counts per second.

NOPI2561.MDI> 1/13/94 - NOPI-256-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1<()	Quartz, syn - SiO2	+	33-1161	0.3	0.00	95	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	2.4	0.00	92		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>()	Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	2.7	0.06	56		P21/* (11)	8.98	6.73	5.15	311	2	2.977
4>()	Berlinite, syn - AlPO4	+	10- 423	3.1	0.12	44		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
5>()	Angelite - Al2(PO4)(OH)3	+	34- 151	3.4	-0.06	56		I2/m (12)	12.15	8.01	5.08	247	4	2.687
6>()	Sanidine, disordered - K(Si3Al)O	+	25- 618	3.4	0.00	39		I2/m (12)	8.45	13.03	7.18	362	4	2.556
7>()	Moganite [NR] - SiO2		38- 360	3.5	-0.06	84		I ()	8.53	10.76	4.93	226	12	2.645
8>()	Bonshtedtite - Na3Fe(PO4)(CO3)	+	35- 678	3.9	-0.12	54		P21/m (11)	8.92	6.63	5.15	305	2	3.050
9>()	Celestine, barian - (Sr,Ba)SO4	+	41-1387	4.8	0.00	44		Pbnm (62)	6.96	8.51	5.41	320	4	4.223
10>()	Orthoclase, barian - (K,Ba)(Si,A		19- 3	5.2	0.00	39		I2/m (12)	8.50	13.06	7.20	365	4	
11>()	Unnamed mineral, syn [NR] - Fe3(	+	37- 481	5.7	0.12	70		P21/n (14)	9.10	10.05	8.02	672	4	3.710
12>()	Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	5.9	0.06	54		A2/a (15)	20.16	9.00	5.19	469	4	2.790
13>()	Despujolsite - Ca3Mn(SO4)2(OH)6!		20- 226	6.0	0.06	54		P-62c (190)	8.56	8.56	10.76	683	2	2.546
14>()	Caminitite - Mg3(SO4)2(OH)2	+	39- 359	6.1	0.12	39		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
15>()	Tridymite-IT20H\RG, syn - SiO2		14- 260	6.1	0.06	20		P ()	9.92	9.92	81.50	6946	160	2.298
16>()	Foggite - CaAl(PO4)(OH)2·H2O		29- 282	6.7	-0.06	20		A2122 (20)	9.27	21.32	5.19	513	8	2.772
17>()	Carnallite - KMgCl3·6H2O	+	24- 869	6.8	-0.06	39	0.6	Pcna (50)	16.15	22.52	9.57	3478	12	1.592
18>()	Kehoeite [NR] - (Zn,Ca)Al2P2H6O1		27- 94	6.8	0.12	70		P ()	13.45	13.45	13.45	2433	8	2.340
19>()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	7.2	-0.06	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
20>()	Celestine, barian, syn - Ba0.25S	+	39-1467	7.4	0.00	70		Pbnm (62)	6.94	8.48	5.39	317	4	4.107
21>()	Lanarkite, syn - Pb2OSO4	+	37- 516	7.9	-0.06	69		I2/m (12)	12.43	5.70	7.08	250	4	6.999
22>()	Sidwillite - MoO3·2H2O	+	39- 363	8.0	-0.06	39		P21/n (14)	10.62	13.82	10.48	1538	16	3.109
23>()	Dumontite - Pb2(UO2)3(PO4)2(OH)4		12- 158	8.0	0.06	20		P21/m (11)	8.16	16.73	7.02	901	2	5.666
24>()	Barboselite - FeFe2(PO4)2(OH)2	+	33- 668	8.0	0.06	56		P21/n (14)	7.40	7.49	7.31	356	2	3.652
25>()	Celsian, syn - BaAl2Si2O8	+	38-1450	8.1	0.00	44		I2/m (12)	8.59	13.05	7.20	368	4	3.390
26>()	Sainfeldite - Ca5H2(AsO4)·4H2O		16- 615	8.1	0.12	44		C2/c (15)	18.64	9.81	10.12	918	8	2.990
27>()	Giniite - FeFe4(PO4)4(OH)2·2H2O		33- 669	8.5	0.06	56		C*** (65)	10.36	26.58	5.16	711	4	3.405
28>()	Kinoshitalite-IT1M\RG - BaMg3Al	+	29- 180	8.6	0.12	44		A2/m (12)	10.26	9.25	5.34	250	2	3.421
29>()	Akaganeite-ITM\RG, syn - FeO(OH		34-1266	8.9	0.00	54		I4/m (87)	10.53	10.53	3.03	168	8	3.510
30>()	Gismondine - CaAl2Si2O8·4H2O	+	39-1373	9.1	0.06	20		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
31>()	Kaolinite-IT1A\RG - Al2Si2O5(OH	+	14- 164	10.2	0.06	9		P-1 (2)	7.41	8.96	5.16	330	2	2.595
32>()	Argentopyrite - AgFe2S3	+	38- 459	10.3	-0.12	70		Pmmn (59)	6.64	11.46	6.45	491	4	4.271
33>()	Ojuelaite - ZnFe2(AsO4)2(OH)2·4H	+	35- 516	10.5	-0.12	13		P21/c (14)	10.25	9.66	5.57	550	2	3.388
34>()	Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	10.7	0.06	56		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
35>()	Celestine, barian, syn - Ba0.50S	+	39-1468	11.1	0.12	44		Pbnm (62)	7.01	8.60	5.42	327	4	4.238
36>()	Paragonite-IT2M#1\RG - NaAl2(Al	+	12- 165	11.2	-0.12	4		A2/a (15)	19.42	8.94	5.15	445	4	2.851
37>()	Purpurite - (Mn,Fe)PO4		37- 478	11.3	0.12	16		Pmnb (62)	5.82	9.77	4.78	272	4	
38>()	Stacyite - KNa2ThSi8O20	+	39- 408	11.9	0.12	44		P4/mcc (124)	7.58	7.58	14.76	849	2	2.950
39>()	Anandite-IT2M#1\RG - BaFe3(Si,F		19- 78	12.0	-0.12	70		A2/a (15)	19.96	9.49	5.47	516	4	3.940
40>()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	12.4	-0.12	17		P21/m (11)	7.35	25.23	6.10	1126	4	2.065

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

NOPI2561.MDI> 1/13/94 - NOPI-256-XRD1

79 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>	() Quartz, syn - SiO ₂	+	33-1161	0.3	0.00	95	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH)	+	14- 164	0.9	0.00	7		P-1 (2)	7.41	8.96	5.16	330	2	2.595
3>	() Carlosturanite - Mg ₂ Si ₁₂ O ₂₈ (OH)		38- 404	0.9	0.00	7		Im (8)	36.01	9.41	7.29	1235	1	1.271
4>	() Pennantite-1\ITM#I#a\RG - (Mn ₅ Al		29- 884	0.9	0.00	6		A2/m (12)	14.40	9.50	5.45	370	2	3.184
5>	() Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH)	+	10- 446	1.0	0.00	8		Aa (9)	14.42	8.95	5.15	330	4	2.599
6>	() Cotunnite, syn - PbCl ₂	+	26-1150	1.0	0.00	7	4.3	Pnam (62)	7.62	9.05	4.53	313	4	5.909
7>	() Clinocllore-IT1M#I#b\RG - Mg ₅		29- 853	1.0	0.00	8		A2/m (12)	14.30	9.30	5.30	350	2	2.637
8>	() Santaclaraitite - CaMn ₄ Si ₅ O ₁₄ (OH) ₂	+	35- 639	1.0	-12	6		P-1 (2)	9.74	9.97	7.60	661	2	3.398
9>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	1.0	0.00	10								2.590
10>	() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	1.0	0.00	7		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
11>	() Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH)	+	16- 606	1.0	0.00	6		Aa (9)	14.61	5.15	8.91	329	4	2.602
12>	() Sapphirine-IT2M\RG - (Mg ₄ Al ₄)(A		19- 750	1.1	0.00	6	3.5	P21/c (14)	9.94	14.43	9.79	1317	4	3.476
13>	() Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH)	+	34- 170	1.1	0.00	6	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
14>	() Leucite - KAlSi ₂ O ₆		15- 47	1.2	-12	2		I41/a (88)	13.06	13.06	13.75	1173	16	2.472
15>	() Clinocllore-IT1M#I#b\RG, ferr		7- 78	1.2	-06	6		A2/m (12)	14.07	9.19	5.31	340	2	2.960
16>	() Uranophane - Ca(UO ₂) ₂ (SiO ₃ OH) ₂ 15	+	39-1360	1.2	0.00	4		P21 (4)	15.92	7.01	6.67	739	2	3.849
17>	() Clinocllore-IT1M#I#b\RG, ferr		24- 506	1.2	0.00	7		P1 (1)	9.27	14.36	5.34	705	2	
18>	() Reinertite - Zn ₃ (AsO ₃) ₂	+	11- 158	1.2	-06	2		Pmnb (51)	7.80	14.40	6.09	684	4	4.289
19>	() Manganyrosomalite - (Mn,Fe) ₈ (Si ₆		12- 249	1.2	0.00	8		P-3m1 (164)	13.36	13.36	7.16	1107	2	3.130
20>	() Kegelite - Pb ₁₂ Zn ₂ Al ₄ Si ₁₁ S ₄ O ₅₄		29- 790	1.3	-12	6								
21>	() Ellenbergerite - Mg ₆ Al ₆ Si ₈ O ₂₈ (	+	40- 507	1.3	-12	5		P63 (173)	12.26	12.26	4.93	641	1	3.102
22>	() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	1.3	0.00	7		P31m (157)	5.31	5.31	42.62	1040	6	2.600
23>	() Autunite - Ca(UO ₂) ₂ (PO ₄) ₂ 10H ₂ O	+	41-1353	1.3	0.00	7		I4/mmm (139)	7.01	7.01	20.74	509	2	3.098
24>	() Cronstedtite-IT1M\RG - Fe ₃ (Si,F	+	17- 470	1.3	-06	9		Am (8)	7.32	9.51	5.49	185	2	3.340
25>	() Rameauite - K ₂ Ca(UO ₂) ₆ O ₈ 19H ₂ O	+	25- 631	1.4	0.00	7		C*/c (15)	13.97	14.26	13.88	1214	4	5.550
26>	() Uranopilite - (UO ₂) ₆ SO ₄ (OH) ₁₀ 12		8- 443	1.4	0.00	7								3.960
27>	() Leadhillite - Pb ₄ (SO ₄)(CO ₃) ₂ (OH)		35- 617	1.4	0.00	7		A ()	11.56	20.79	9.09	1093	8	6.559
28>	() Antigorite-IT1M\RG - Mg ₃ Si ₂ O ₅ (O		21- 963	1.4	0.06	4		P ()	43.53	9.26	7.26	2927	16	2.516
29>	() Pyrophyllite-IT1A\RG - Al ₂ Si ₄ O ₁₀	+	25- 22	1.4	0.00	4		P-1 (2)	5.16	9.35	5.16	213	1	2.815
30>	() Dewindtite - Pb(UO ₂) ₃ (PO ₄) ₂ (OH) ₂	+	39-1350	1.4	0.00	3		B222 (21)	15.83	17.30	13.64	1867	8	4.800
31>	() Althausite - Mg ₂ PO ₄ (OH)	+	29- 869	1.4	0.00	5		Pna21 (33)	8.26	14.38	6.05	719	8	2.967
32>	() Brugnatellite - Mg ₆ FeCO ₃ (OH) ₁₃ 14		14- 365	1.4	0.00	3		P63/mmc (194)	5.48	5.48	16.00	416	1	2.214
33>	() Clinocllore-IT1M#I#a\RG, ferroa		16- 362	1.4	0.00	6		A2/m (12)	14.20	9.29	5.32	348	2	
	() Metakahlerite - Fe(UO ₂) ₂ (AsO ₄) ₂ 1		12- 576	1.4	0.00	6								
34>	() Weeksite - K ₂ (UO ₂) ₂ (Si ₆ O ₁₅)14H ₂ O		12- 462	1.4	-06	9		Pnna (52)	14.26	35.88	14.20	7265	16	4.018
36>	() Fairfieldite - Ca ₂ (Mn,Fe)(PO ₄) ₂ 1		10- 390	1.4	0.00	3		P-1 (2)	5.78	6.57	5.48	192	1	3.080
37>	() Clinocllore-IT1M#I#b\RG, ferroa		16- 351	1.4	0.00	8		A2/m (12)	14.35	9.29	5.32	352	2	2.920
38>	() Orthochrysotile-IT20#c#1\RG - M	+	22-1162	1.4	0.00	6		Bm21b (36)	9.25	14.20	5.34	351	4	2.624
39>	() Kaolinite-IT1M\RG - Al ₂ Si ₂ O ₅ (O		29-1488	1.5	-06	9		A*/ (12)	7.39	8.93	5.16	165	2	2.601
40>	() Wadsleyite - (Mg,Fe) ₂ SiO ₄		37- 415	1.5	0.00	6		Ibmm (74)	8.24	11.51	5.70	270	8	
41>	() Clinocllore-IT1M#I#b\RG, ferr	+	29- 701	1.5	-12	9		A2/m (12)	14.20	9.28	5.36	350	2	2.910
42>	() Gismondine - CaAl ₂ Si ₂ O ₈ 14H ₂ O	+	20- 452	2.4	0.00	92		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
43>	() Sisdorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	2.7	0.06	56		P21/* (11)	8.98	6.73	5.15	311	2	2.977
44>	() Berlinite, syn - AlPO ₄	+	10- 423	3.1	0.12	44		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
45>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	3.4	-06	56		I2/m (12)	12.15	8.01	5.08	247	4	2.687
46>	() Sanidine, disordered - K(Si ₃ Al) ₃ O	+	25- 618	3.4	0.00	39		I2/m (12)	8.45	13.03	7.18	362	4	2.556
47>	() Moganite [NR] - SiO ₂		38- 360	3.5	-06	84		I ()	8.53	10.76	4.93	226	12	2.645
48>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	3.9	-12	54		P21/m (11)	8.92	6.63	5.15	305	2	3.050
49>	() Celestine, barian - (Sr,Ba)SO ₄	+	41-1387	4.8	0.00	44		Pbnnm (62)	6.96	8.51	5.41	320	4	4.223
50>	() Orthoclase, barian - (K,Ba)(Si,A		19- 3	5.2	0.00	39		I2/m (12)	8.50	13.06	7.20	365	4	
51>	() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	5.7	0.12	70		P21/n (14)	9.10	10.05	8.02	672	4	3.710
52>	() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	5.9	0.06	54		A2/a (15)	20.16	9.00	5.19	469	4	2.790
53>	() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆ 1		20- 226	6.0	0.06	54		P-62c (190)	8.56	8.56	10.76	683	2	2.546
54>	() Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	6.1	0.12	39		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
55>	() Tridymite-IT20H\RG, syn - SiO ₂		14- 260	6.1	0.06	20		P ()	9.92	9.92	81.50	6946	160	2.298
56>	() Foggite - CaAl(PO ₄)(OH) ₂ 1H ₂ O		29- 282	6.7	-06	20		A2122 (20)	9.27	21.32	5.19	513	8	2.772
57>	() Carnallite - KMgCl ₃ 6H ₂ O	+	24- 869	6.8	-06	39	0.6	Pcna (50)	16.15	22.52	9.57	3478	12	1.592
58>	() Kehoeite [NR] - (Zn,Ca)Al ₂ P ₂ H ₆ O1		27- 94	6.8	0.12	70		P ()	13.45	13.45	13.45	2433	8	2.340
59>	() Khademitite - Al(SO ₄)(OH)15H ₂ O	+	26-1011	7.2	-06	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
60>	() Celestine, barian, syn - Ba _{0.25} S	+	39-1467	7.4	0.00	70		Pbnnm (62)	6.94	8.48	5.39	317	4	4.107
61>	() Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	7.9	-06	69		I2/m (12)	12.43	5.70	7.08	250	4	6.999
62>	() Sidwillite - MoO ₃ 12H ₂ O	+	39- 363	8.0	-06	39		P21/n (14)	10.62	13.82	10.48	1538	16	3.109
63>	() Dumontite - Pb ₂ (UO ₂) ₃ (PO ₄) ₂ (OH) ₄		12- 158	8.0	0.06	20		P21/m (11)	8.16	16.73	7.02	901	2	5.666
64>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	8.0	0.06	56		P21/n (14)	7.40	7.49	7.31	356	2	3.652
65>	() Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	8.1	0.00	44		I2/m (12)	8.59	13.05	7.20	368	4	3.390
66>	() Sainfeldite - Ca ₅ H ₂ (AsO ₄) ₄ H ₂ O		16- 615	8.1	0.12	44		C2/c (15)	18.64	9.81	10.12	918	8	2.990

1 - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

01 - reduced-cell volume; dx - measured density if calculated is not available.

79 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
67>	()	Giniite - FeFe4(PO4)4(OH)212H2O		33- 669	8.5	0.06	56		C*** (65)	10.36	26.58	5.16	711	4	3.405
68>	()	Kinoshitalite-\IT1M\RG - BaMg3Al	+	29- 180	8.6	0.12	44		A2/m (12)	10.26	9.25	5.34	250	2	3.421
69>	()	Akaganeite-\ITM\RG, syn - FeO(OH)		34-1266	8.9	0.00	54		I4/m (87)	10.53	10.53	3.03	168	8	3.510
70>	()	Gismondine - CaAl2Si2O814H2O	+	39-1373	9.1	0.06	20		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
>	()	Argentopyrite - AgFe2S3	+	38- 459	10.3	-.12	70		Pmmn (59)	6.64	11.46	6.45	491	4	4.271
>	()	Ojuelaite - ZnFe2(AsO4)2(OH)214H	+	35- 516	10.5	-.12	13		P21/c (14)	10.25	9.66	5.57	550	2	3.388
73>	()	Sepiolite - Mg4Si6O15(OH)216H2O	+	26-1226	10.7	0.06	56		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
74>	()	Celestine, barian, syn - Ba0.50S	+	39-1468	11.1	0.12	44		Pbnm (62)	7.01	8.60	5.42	327	4	4.238
75>	()	Paragonite-\IT2M#1\RG - NaAl2(Al	+	12- 165	11.2	-.12	4		A2/a (15)	19.42	8.94	5.15	445	4	2.851
76>	()	Purpurite - (Mn,Fe)PO4		37- 478	11.3	0.12	16		Pmnb (62)	5.82	9.77	4.78	272	4	
77>	()	Steacyite - KNa2ThSi8O20	+	39- 408	11.9	0.12	44		P4/mcc (124)	7.58	7.58	14.76	849	2	2.950
78>	()	Anandite-\IT2M#1\RG - BaFe3(Si,F		19- 78	12.0	-.12	70		A2/a (15)	19.96	9.49	5.47	516	4	3.940
79>	()	Tamarugite - NaAl(SO4)216H2O	+	19-1186	12.4	-.12	17		P21/m (11)	7.35	25.23	6.10	1126	4	2.065

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

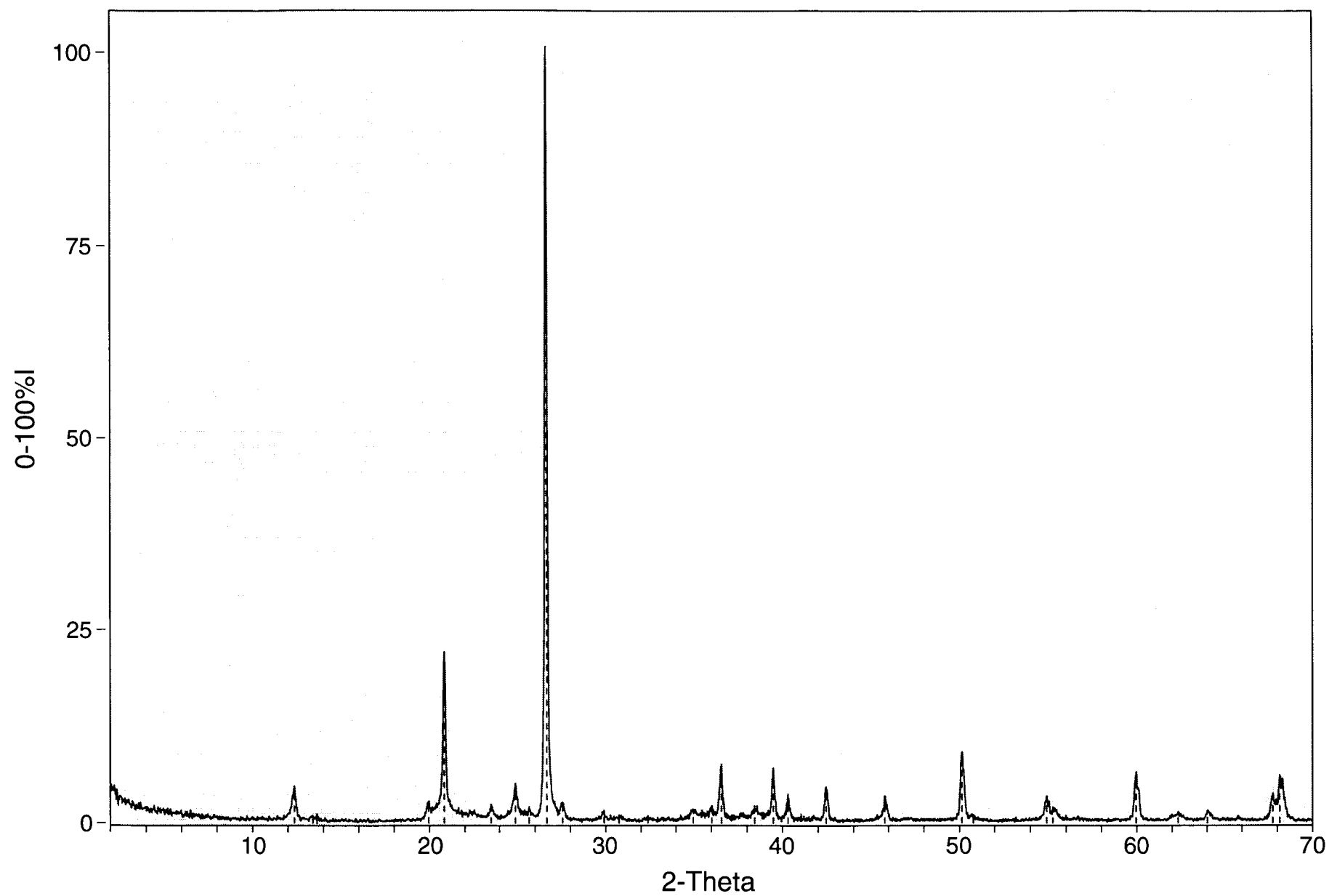
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/13/94 - NOPI-257-XRD1

File: NOPI2571.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

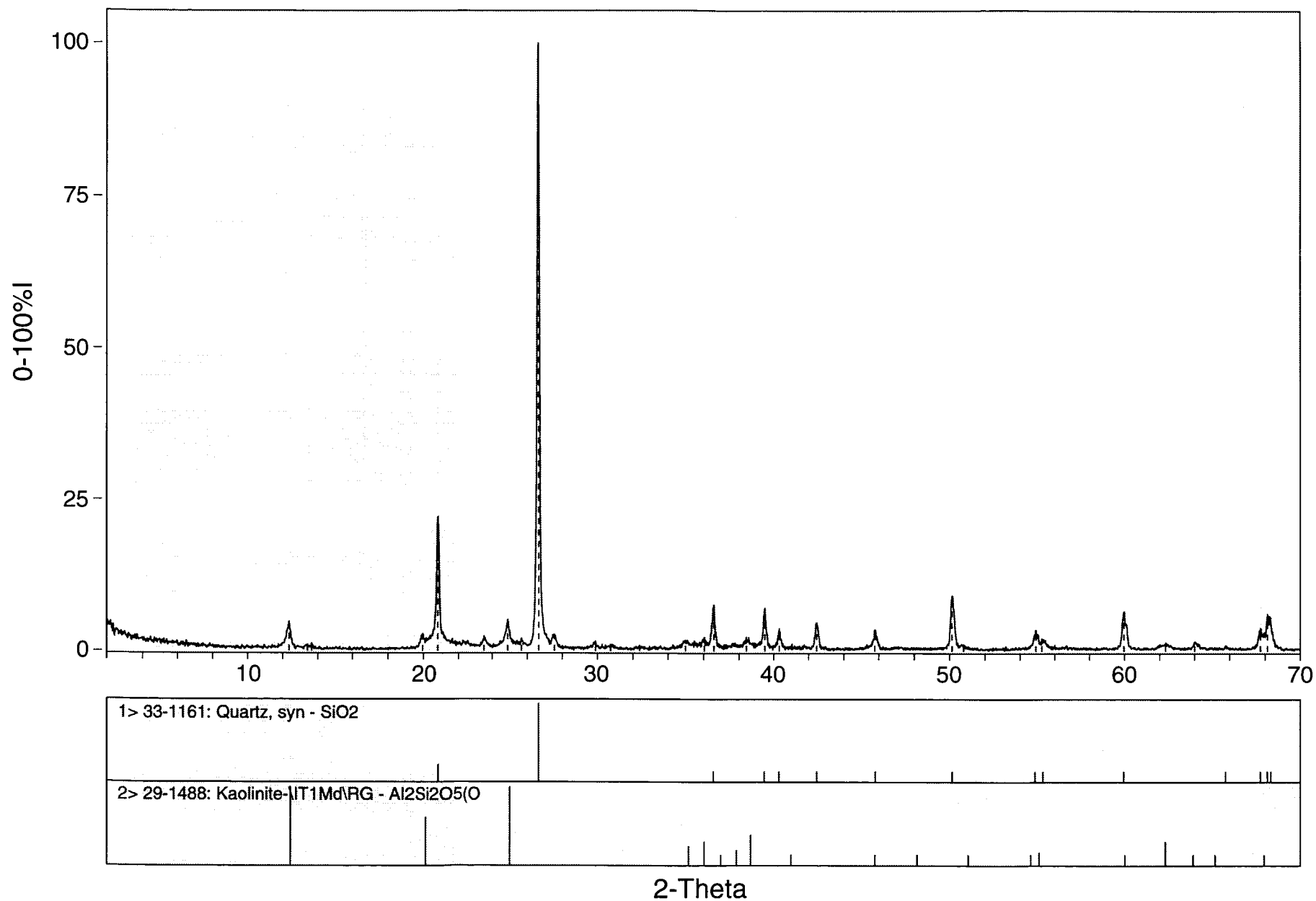


ID: 1/13/94 - NOPI-257-XRD1

File: NOPI2571.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2571.MDI> 1/13/94 - NOPI-257-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598          Filter length(pts) = 25
Scan Range = 2 - 70              Noise level(sigmas) = 2.0
Step Size  = .02                 Intensity cutoff(%) = .5-100
Count Time = 1 sec.              2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.368	7.1510	12.337	7.1687	8	99	4.9	1523	7.6	0.277
2:	13.408	6.5985	13.409	6.5979	8	15	0.7	131	0.7	0.157
3:	13.648	6.4830	13.643	6.4851	7	19	0.9	139	0.7	0.132
4:	19.951	4.4467	19.973	4.4419	13	49	2.4	741	3.7	0.272
5:	20.833	4.2604	20.837	4.2597	13	449	22.0	6449	32.0	0.259
6:	23.535	3.7771	23.547	3.7753	15	37	1.8	323	1.6	0.157
7:	24.874	3.5766	24.873	3.5769	15	90	4.4	1519	7.5	0.304
8:	25.655	3.4695	25.657	3.4693	17	28	1.4	238	1.2	0.153
9:	26.654	3.3418	26.638	3.3438	15	2041	100.0	20144	100.0	0.178
10:	27.554	3.2346	27.532	3.2371	12	47	2.3	638	3.2	0.244
11:	29.895	2.9864	29.867	2.9892	6	31	1.5	436	2.2	0.253
12:	30.757	2.9047	30.761	2.9043	6	17	0.8	280	1.4	0.296
13:	32.378	2.7628	32.373	2.7633	6	15	0.7	123	0.6	0.148
14:	34.959	2.5645	34.968	2.5639	10	27	1.3	648	3.2	0.432
15:	36.037	2.4902	36.036	2.4903	11	35	1.7	1199	6.0	0.617
16:	36.578	2.4547	36.552	2.4564	13	142	7.0	1510	7.5	0.191
17:	38.421	2.3410	38.443	2.3398	13	34	1.7	435	2.2	0.230
18:	39.480	2.2806	39.473	2.2811	12	132	6.5	1362	6.8	0.186
19:	40.301	2.2361	40.302	2.2360	11	65	3.2	633	3.1	0.175
20:	42.462	2.1271	42.469	2.1268	8	87	4.3	1036	5.1	0.214
21:	45.765	1.9810	45.784	1.9802	6	69	3.4	910	4.5	0.237
22:	50.127	1.8184	50.160	1.8172	7	180	8.8	2471	12.3	0.247
23:	50.802	1.7958	50.766	1.7970	6	20	1.0	415	2.1	0.373
24:	54.908	1.6708	54.926	1.6703	7	71	3.5	1428	7.1	0.362
25:	55.250	1.6613	55.248	1.6613	8	40	2.0	887	4.4	0.399
26:	59.969	1.5413	59.986	1.5409	7	128	6.3	1904	9.5	0.268
27:	62.351	1.4880	62.349	1.4881	7	25	1.2	558	2.8	0.402
28:	64.012	1.4534	64.043	1.4527	7	28	1.4	361	1.8	0.232
29:	67.752	1.3820	67.785	1.3814	6	72	3.5	1363	6.8	0.341
30:	68.135	1.3751	68.160	1.3747	6	121	5.9	3444	17.1	0.512

* Intensity values are based on counts per second.

NOPI2571.MDI> 1/13/94 - NOPI-257-XRD1

40 Hits Sorted on Figure-Of-Merit														QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>()	Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649												
2>()	Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.4	0.06	51		P21/c (14)	10.02	10.61	9.84	1046	4	2.224												
3>()	Moganite [NR] - SiO ₂		38- 360	6.4	-0.06	82		I ()	8.53	10.76	4.93	226	12	2.645												
4>()	Berlinite, syn - AlPO ₄	+	10- 423	7.3	0.12	40		P31,212 (151)	4.94	4.94	10.97	232	3	2.618												
5>()	Angelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	8.0	0.12	36		I2/m (12)	12.15	8.01	5.08	247	4	2.687												
6>()	Despujolite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	9.1	0.06	51		P-62c (190)	8.56	8.56	10.76	683	2	2.546												
7>()	Sanidine, disordered - K(Si ₃ Al)O ₈	+	25- 618	9.5	0.00	36		I2/m (12)	8.45	13.03	7.18	362	4	2.556												
8>()	Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	11.5	-0.06	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924												
9>()	Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	11.5	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921												
10>()	Kehoeite [NR] - (Zn,Ca)Al ₂ P ₂ H ₆ O ₁		27- 94	11.5	0.12	67		P ()	13.45	13.45	13.45	2433	8	2.340												
11>()	Orthoclase, barian - (K,Ba)(Si,A		19- 3	12.3	0.00	36		I2/m (12)	8.50	13.06	7.20	365	4													
12>()	Tridymite-IT20H\RG, syn - SiO ₂		14- 260	13.9	0.06	21		P ()	9.92	9.92	81.50	6946	160	2.298												
13>()	Sidwillite - MoO ₃ ·2H ₂ O	+	39- 363	15.0	-0.06	36		P21/n (14)	10.62	13.82	10.48	1538	16	3.109												
14>()	Akaganeite-ITM\RG, syn - FeO(OH		34-1266	15.0	0.00	51		I4/m (87)	10.53	10.53	3.03	168	8	3.510												
15>()	Barrosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	15.6	0.06	54		P21/n (14)	7.40	7.49	7.31	356	2	3.652												
16>()	Caminitite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	16.8	-0.06	54		I41/amd (141)	5.25	5.25	12.99	179	2	2.775												
17>()	Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	17.1	0.00	40		I2/m (12)	8.59	13.05	7.20	368	4	3.390												
18>()	Argentopyrite - AgFe ₂ S ₃	+	38- 459	17.3	-0.12	67		Pmmn (59)	6.64	11.46	6.45	491	4	4.271												
19>()	Dumontite - Pb ₂ (UO ₂) ₃ (PO ₄) ₂ (OH) ₄		12- 158	18.3	0.06	21		P21/m (11)	8.16	16.73	7.02	901	2	5.666												
20>()	Kinoshitalite-IT1M\RG - BaMg ₃ Al	+	29- 180	19.0	0.12	40		A2/m (12)	10.26	9.25	5.34	250	2	3.421												
21>()	Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	20.4	-0.12	16		P21/m (11)	7.35	25.23	6.10	1126	4	2.065												
22>()	Halloysite-7A - Al ₂ Si ₂ O ₅ (OH) ₄		29-1487	20.9	-0.12	3		P ()	5.13	5.13	7.16	163	1	2.624												
23>()	Alamosite - PbSiO ₃		29- 782	23.3	-0.12	40		Pn (7)	12.25	7.06	11.24	893	12	6.319												
24>()	Potassium alum, syn - KAl(SO ₄) ₂ ·	+	7- 17	24.5	0.12	11		Pa3 (205)	12.16	12.16	12.16	1797	4	1.754												
25>()	Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH	+	16- 606	26.8	0.12	3		Aa (9)	14.61	5.15	8.91	329	4	2.602												
26>()	Microcline, ordered - KAlSi ₃ O ₈	+	19- 926	27.2	-0.12	16		P-1 (2)	7.62	7.92	7.22	361	2	2.561												
27>()	Magnesium-zippeite - Mg ₂ (UO ₂) ₆ (S		29- 876	27.9	0.06	5								3.300												
28>()	Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	28.1	-0.12	13		P212121 (19)	11.87	11.98	6.85	974	4	1.681												
29>()	Montmorillonite-21A - Na _{0.3} (Al,M		29-1499	28.5	0.00	2		P ()	5.21	5.21	22.00	517	1													
30>()	Montmorillonite-17A - Ca _{0.2} Al ₂ Si		19- 150	29.5	0.12	2		P ()	5.18	5.18	17.58	409	1	1.936												
31>()	Moissanite-4\ITH\RG, syn - SiC	+	22-1317	29.5	0.06	2		P63mc (186)	3.07	3.07	10.05	82	2	1.620												
32>()	Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	30.9	0.12	6								2.590												
33>()	Sanidine - (K,Na)(Si ₃ Al)O ₈		19-1227	31.0	-0.12	2		I2/m (12)	8.32	13.00	7.17	353	4													
>()	Lizardite-IT6(3)T\RG, aluminian	+	31- 782	32.2	-0.12	4		P31m (157)	5.31	5.31	42.62	1040	6	2.600												
>()	Pennantite-1\ITM#I#a\RG - (Mn ₅ Al		29- 884	32.5	-0.12	4		A2/m (12)	14.40	9.50	5.45	370	2	3.184												
36>()	Moissanite-4\ITH\RG, syn - SiC	+	29-1127	32.5	0.12	2		P63mc (186)	3.08	3.08	10.06	83	4	3.220												
37>()	Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH	+	10- 446	33.5	0.06	3		Aa (9)	14.42	8.95	5.15	330	4	2.599												
38>()	Molybdate, syn - MoO ₃	+	5- 508	34.1	0.12	2	3.0	Pbnm (62)	3.96	13.86	3.70	203	4	4.710												
39>()	Corrensite - Mg ₉ (Si,Al) ₈ O ₂₀ (OH) ₁		42- 620	34.2	-0.06	3		P ()	5.34	5.34	32.06	791	1	2.031												
40>()	Kaolinite-IT1Md\RG - Al ₂ Si ₂ O ₅ (O		29-1488	35.6	-0.06	4		A*/* (12)	7.39	8.93	5.16	165	2	2.601												

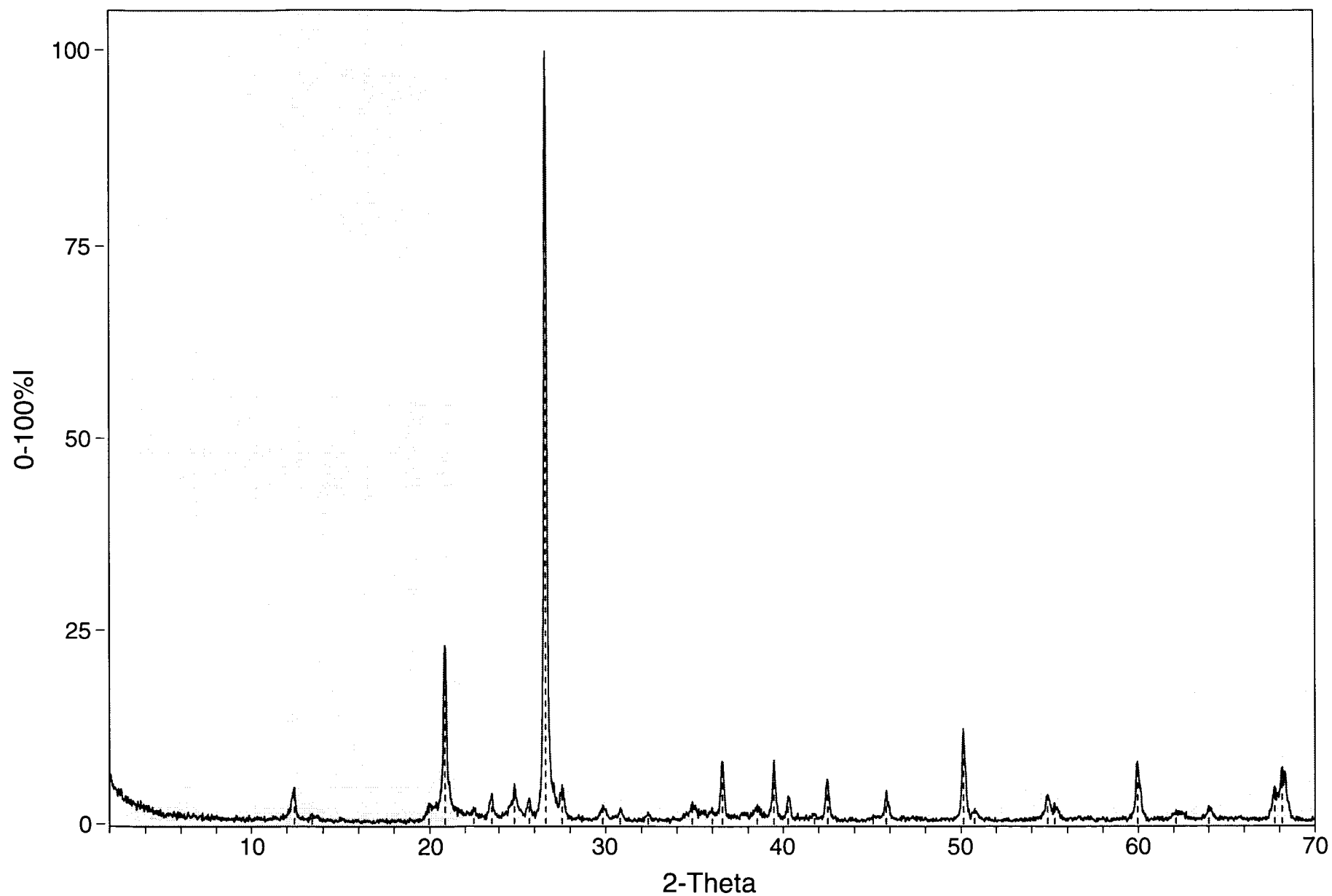
* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/13/94 - NOPI-2581-XRD1
File: NOPI2581.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

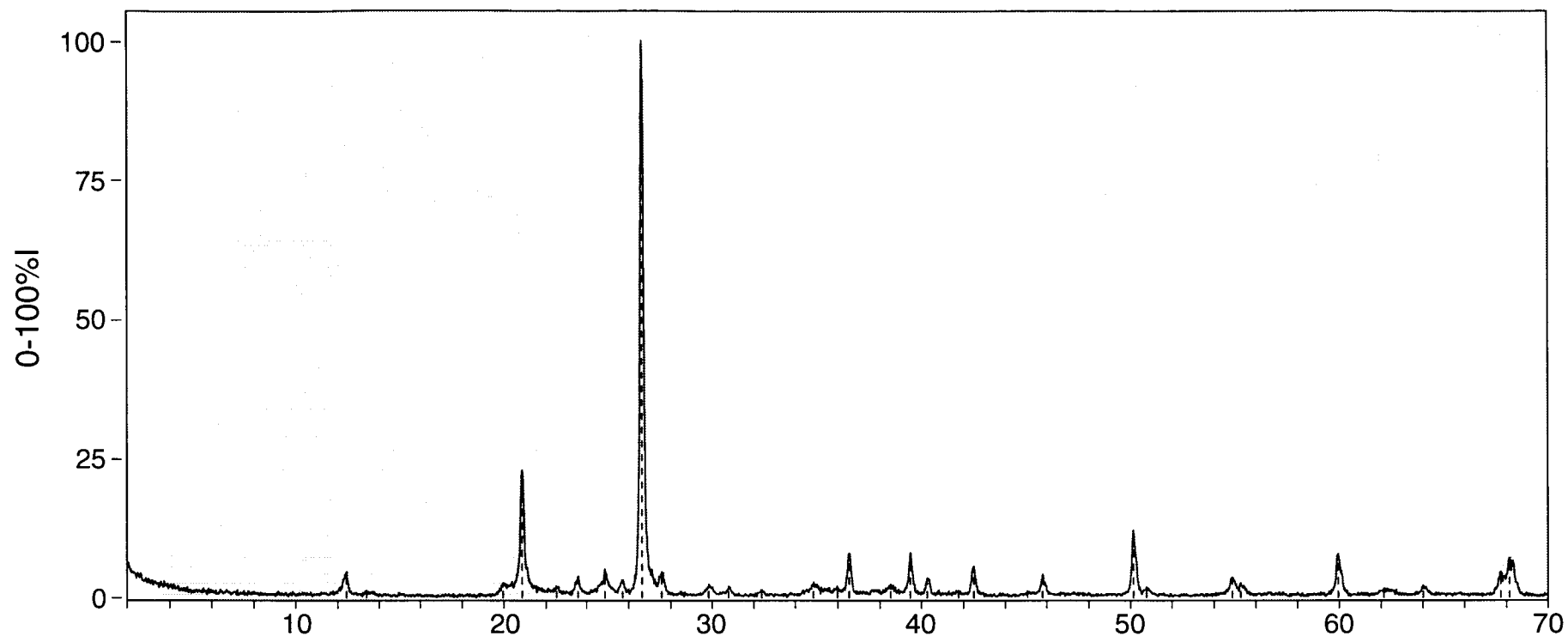


ID: 1/13/94 - NOPI-2581-XRD1

File: NOPI2581.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



1> 33-1161: Quartz, syn - SiO₂

2> 31-0966: Orthoclase - KAlSi₃O₈

3> 10-0446: Dickite - Al₂Si₂O₅(OH)

4> 19-1227: Sanidine - (K,Na)(Si₃Al)O₈

2-Theta

File: NOPI2581.MDI> 1/13/94 - NOPI-259-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598          Filter length(pts) = 25
Scan Range = 2 - 70              Noise level(sigmas) = 2.0
Step Size  = .02                 Intensity cutoff(%) = .5-100
Count Time = 1 sec.              2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.411	7.1263	12.372	7.1487	7	65	4.5	841	5.0	0.233
2:	13.392	6.6064	13.391	6.6065	7	15	1.0	103	0.6	0.124
3:	19.954	4.4461	19.992	4.4377	8	35	2.4	671	4.0	0.345
4:	20.854	4.2562	20.866	4.2539	9	330	22.8	5694	33.7	0.311
5:	22.533	3.9426	22.541	3.9413	14	20	1.4	152	0.9	0.137
6:	23.591	3.7682	23.572	3.7712	11	49	3.4	551	3.3	0.202
7:	24.874	3.5767	24.871	3.5771	15	62	4.3	982	5.8	0.285
8:	25.711	3.4621	25.699	3.4637	16	34	2.3	308	1.8	0.163
9:	26.634	3.3443	26.643	3.3431	14	1448	100.0	16879	100.0	0.210
10:	27.553	3.2347	27.534	3.2369	12	70	4.8	906	5.4	0.233
11:	29.834	2.9924	29.853	2.9905	7	30	2.1	479	2.8	0.287
12:	30.793	2.9013	30.792	2.9014	6	27	1.9	330	2.0	0.220
13:	32.373	2.7633	32.367	2.7637	6	18	1.2	181	1.1	0.181
14:	34.853	2.5721	34.874	2.5706	9	37	2.6	843	5.0	0.410
15:	35.991	2.4933	35.988	2.4935	10	23	1.6	917	5.4	0.718
16:	36.553	2.4563	36.557	2.4560	14	108	7.5	1210	7.2	0.202
17:	38.513	2.3357	38.516	2.3355	11	32	2.2	432	2.6	0.243
18:	39.473	2.2810	39.475	2.2810	9	117	8.1	1320	7.8	0.203
19:	40.275	2.2375	40.296	2.2364	9	46	3.2	486	2.9	0.190
20:	41.752	2.1617	41.737	2.1624	6	17	1.2	239	1.4	0.253
21:	42.491	2.1257	42.477	2.1264	6	79	5.5	1004	5.9	0.229
22:	45.073	2.0098	45.092	2.0090	6	17	1.2	134	0.8	0.142
23:	45.793	1.9798	45.809	1.9792	7	58	4.0	715	4.2	0.222
24:	50.153	1.8175	50.164	1.8171	5	179	12.4	2413	14.3	0.243
25:	50.772	1.7968	50.771	1.7968	5	30	2.1	505	3.0	0.303
26:	54.873	1.6718	54.894	1.6712	7	54	3.7	1360	8.1	0.453
27:	55.274	1.6606	55.247	1.6613	7	34	2.3	946	5.6	0.501
28:	59.953	1.5417	59.971	1.5413	5	119	8.2	1847	10.9	0.279
29:	62.133	1.4927	62.159	1.4922	7	22	1.5	414	2.5	0.339
30:	64.013	1.4534	64.031	1.4530	8	29	2.0	324	1.9	0.201
31:	67.733	1.3823	67.774	1.3816	5	69	4.8	1864	11.0	0.486
32:	68.153	1.3748	68.168	1.3745	5	111	7.7	3112	18.4	0.505

* Intensity values are based on counts per second.

NOPI2581.MDI> 1/13/94 - NOPI-2581-XRD1

39 Hits Sorted on Figure-Of-Merit													QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>	()	Quartz, syn - SiO2	+	33-1161	0.4	0.00	99	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649										
2>	()	Sanidine, disordered - K(Si3Al)O	+	25-618	3.7	0.00	51		I2/m (12)	8.45	13.03	7.18	362	4	2.556										
3>	()	Moganite [NR] - SiO2	+	38-360	3.7	0.00	51		I ()	8.53	10.76	4.93	226	12	2.645										
4>	()	Gismondine - CaAl2Si2O8·4H2O	+	20-452	4.0	0.06	66		P21/c (14)	10.02	10.61	9.84	1046	4	2.224										
5>	()	Microcline, ordered - KAlSi3O8	+	19-926	5.7	-12	21		P-1 (2)	7.62	7.92	7.22	361	2	2.561										
6>	()	Augelite - Al2(PO4)(OH)3	+	34-151	6.3	-06	56		I2/m (12)	12.15	8.01	5.08	247	4	2.687										
7>	()	Orthoclase, barian - (K,Ba)(Si,A	+	19-3	6.9	0.00	51		I2/m (12)	8.50	13.06	7.20	365	4											
8>	()	Celestine, barian - (Sr,Ba)SO4	+	41-1387	7.0	0.12	98		Pbnm (62)	6.96	8.51	5.41	320	4	4.223										
9>	()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	8.1	0.00	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924										
10>	()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	8.5	0.06	23		Pcab (61)	11.19	13.06	10.89	1591	8	1.921										
11>	()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	8.9	-12	21		P21/m (11)	7.35	25.23	6.10	1126	4	2.065										
12>	()	Despujolsite - Ca3Mn(SO4)2(OH)6	+	20-226	9.2	0.06	66		P-62c (190)	8.56	8.56	10.76	683	2	2.546										
13>	()	Kehoeite [NR] - (Zn,Ca)Al2P2H6O1	+	27-94	9.6	0.00	70		P ()	13.45	13.45	13.45	2433	8	2.340										
14>	()	Barbosallite - FeFe2(PO4)2(OH)2	+	33-668	9.7	0.06	56		P21/n (14)	7.40	7.49	7.31	356	2	3.652										
15>	()	Sidwillite - MoO3·2H2O	+	39-363	10.1	-06	51		P21/n (14)	10.62	13.82	10.48	1538	16	3.109										
16>	()	Tridymite-IT20H\RG, syn - SiO2	+	14-260	10.3	0.06	22		P ()	9.92	9.92	81.50	6946	160	2.298										
17>	()	Celestine, barian, syn - Ba0.25S	+	39-1467	11.0	0.06	37		Pbnm (62)	6.94	8.48	5.39	317	4	4.107										
18>	()	Lanarkite, syn - Pb2(SO4)O	+	33-1486	11.1	-06	70		I2/m (12)	12.42	5.70	7.07	249	4	7.019										
19>	()	Lanarkite, syn - Pb2OSO4	+	37-516	11.2	-06	70		I2/m (12)	12.43	5.70	7.08	250	4	6.999										
20>	()	Celsian, syn - BaAl2Si2O8	+	38-1450	11.7	0.12	98		I2/m (12)	8.59	13.05	7.20	368	4	3.390										
21>	()	Lipscombite, manganoan - (Fe,Mn)	+	14-310	12.1	-12	37		P41212 (92)	7.40	7.40	12.81	701	4	3.660										
22>	()	Caminite - Mg3(SO4)2(OH)2	+	39-359	12.6	-06	56		I41/amd (141)	5.25	5.25	12.99	179	2	2.775										
23>	()	Argentopyrite - AgFe2S3	+	38-459	13.1	-06	37		Pmmn (59)	6.64	11.46	6.45	491	4	4.271										
24>	()	Dumontite - Pb2(UO2)3(PO4)2(OH)4	+	12-158	13.3	0.12	21		P21/m (11)	8.16	16.73	7.02	901	2	5.666										
25>	()	Akaganeite-ITM\RG, syn - FeO(OH)	+	34-1266	13.9	-12	83		I4/m (87)	10.53	10.53	3.03	168	8	3.510										
26>	()	Orthoclase - KAlSi3O8	+	31-966	16.2	0.12	5		I2/m (12)	8.43	12.98	7.20	360	4	2.571										
27>	()	Halloysite-7A - Al2Si2O5(OH)4	+	29-1487	17.1	-12	2		P ()	5.13	5.13	7.16	163	1	2.624										
28>	()	Dickite-IT2M#1\RG - Al2Si2O5(OH)	+	10-446	17.9	0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599										
29>	()	Tungusite - Ca4Fe2Si6O15(OH)6	+	19-231	21.2	0.00	11								2.590										
30>	()	Moissanite-4ITH\RG, syn - SiC	+	22-1317	21.5	0.06	2		P63mc (186)	3.07	3.07	10.05	82	2	1.620										
31>	()	Sanidine - (K,Na)(Si3Al)O8	+	19-1227	21.6	-12	3		I2/m (12)	8.32	13.00	7.17	353	4											
32>	()	Lizardite-IT1T\RG - Mg3Si2O5(OH)	+	18-779	24.1	0.12	2		P31m (157)	5.32	5.32	7.32	180	1	2.561										
33>	()	Montmorillonite-21A - Na0.3(Al,M	+	29-1499	24.7	0.06	2		P ()	5.21	5.21	22.00	517	1											
	()	Halloysite-7A - Al2Si2O5(OH)4	+	9-453	24.7	-12	2		P ()	5.12	5.12	7.30	166	1	2.582										
	()	Epsomite, syn - MgSO4·7H2O	+	36-419	25.0	-06	10		P212121 (19)	11.87	11.98	6.85	974	4	1.681										
36>	()	Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	25.3	0.06	56		Pncn (52)	13.43	26.88	5.28	1906	4	2.257										
37>	()	Paragonite-IT2M#1\RG - NaAl2(Al	+	12-165	25.5	0.00	3		A2/a (15)	19.42	8.94	5.15	445	4	2.851										
38>	()	Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16-606	25.5	0.12	4		Aa (9)	14.61	5.15	8.91	329	4	2.602										
39>	()	Galena, syn - PbS	+	5-592	26.6	-06	2		Fm3m (225)	5.94	5.94	5.94	52	4	7.597										

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

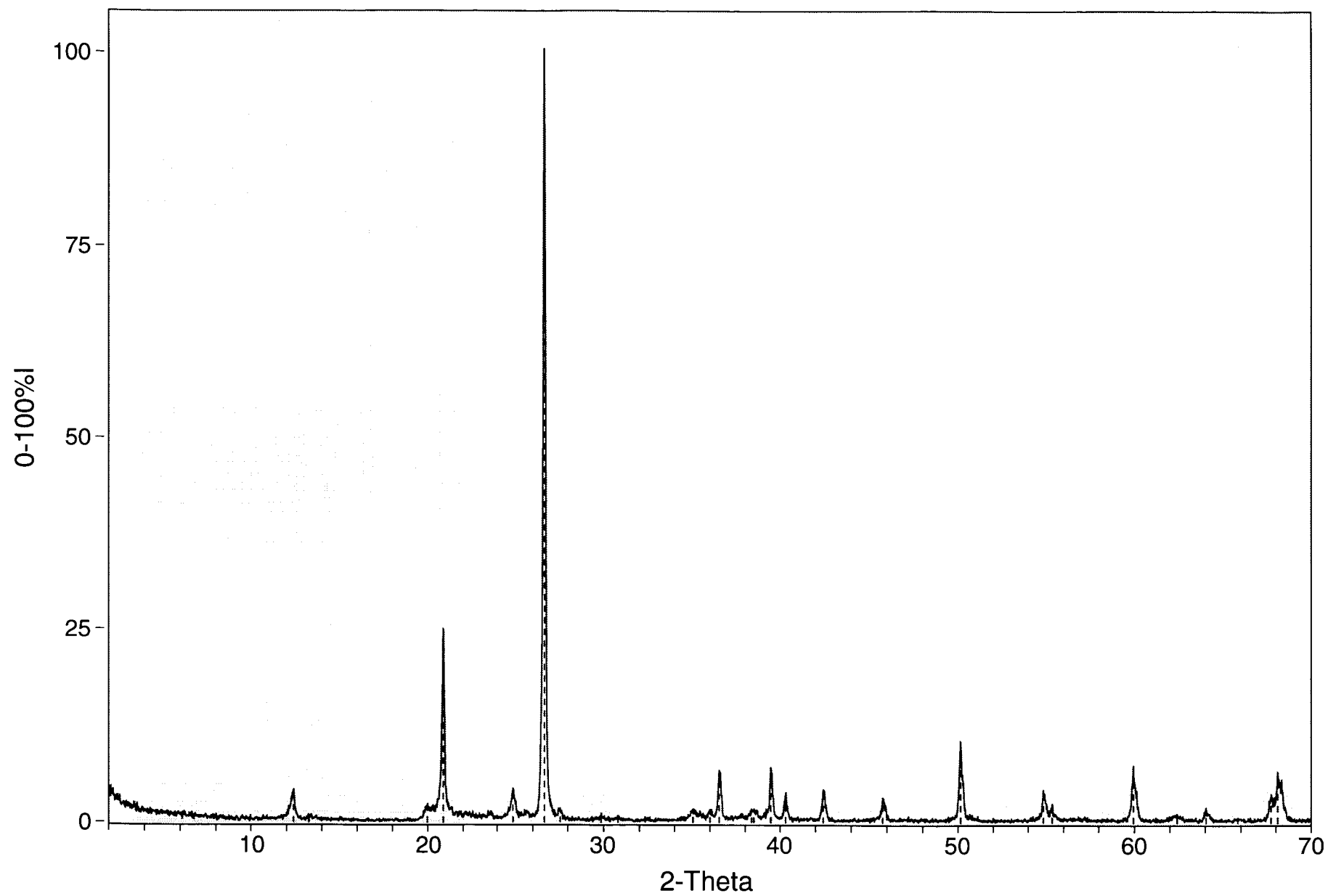
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/14/94 - NOPI-259-XRD1

File: NOPI2591.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

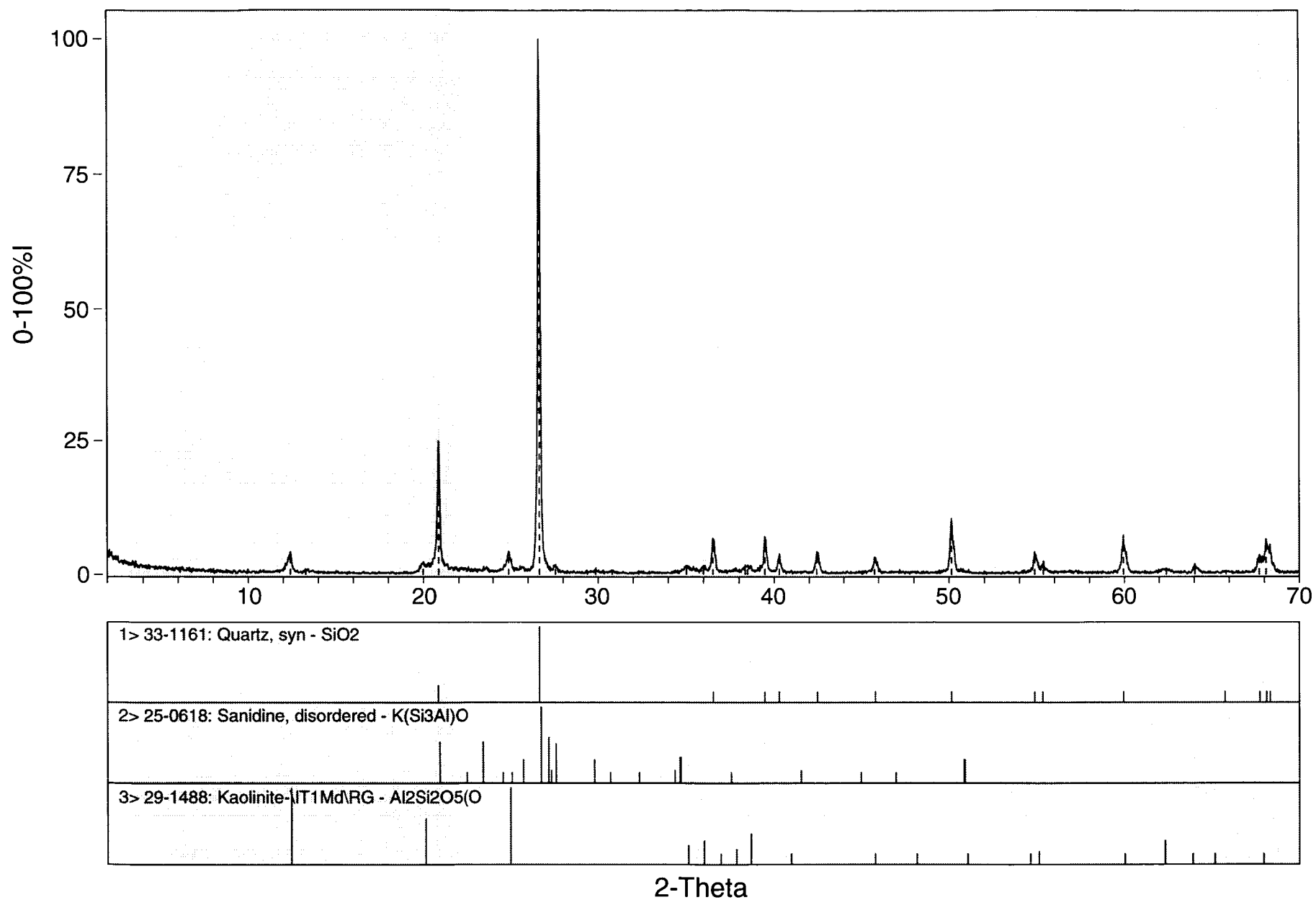


ID: 1/14/94 - NOPI-259-XRD1

File: NOPI2591.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Fri Jan 14 1994 @3:51pm

File: NOPI2591.MDI> 1/14/94 - NOPI-259-XRD1

----- Scan Parameters: -----		----- Search Parameters: -----	
Radiation = CU_1.540598		Filter length(pts) = 25	
Scan Range = 2 - 70		Noise level(sigmas) = 2.0	
Step Size = .02		Intensity cutoff(%) = .5-100	
Count Time = 1 sec.		2-Theta Zero (deg) = 0	

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.395	7.1353	12.354	7.1588	7	82	4.0	1262	6.3	0.277
2:	13.280	6.6617	13.290	6.6569	7	15	0.7	102	0.5	0.122
3:	19.977	4.4410	20.000	4.4360	8	42	2.0	1139	5.7	0.488
4:	20.877	4.2516	20.864	4.2542	9	519	25.0	6878	34.3	0.239
5:	24.898	3.5734	24.888	3.5748	14	77	3.7	1083	5.4	0.253
6:	26.657	3.3413	26.651	3.3422	14	2075	100.0	20031	100.0	0.174
7:	27.557	3.2343	27.543	3.2358	11	30	1.4	309	1.5	0.185
8:	29.859	2.9899	29.851	2.9907	5	22	1.1	279	1.4	0.228
9:	30.797	2.9010	30.791	2.9015	4	15	0.7	244	1.2	0.293
10:	32.321	2.7676	32.334	2.7665	4	13	0.6	101	0.5	0.140
11:	35.038	2.5589	35.049	2.5582	7	32	1.5	609	3.0	0.343
12:	35.998	2.4929	36.007	2.4923	9	29	1.4	998	5.0	0.619
13:	36.520	2.4584	36.548	2.4566	10	133	6.4	1514	7.6	0.205
14:	38.359	2.3447	38.394	2.3426	11	28	1.3	380	1.9	0.244
15:	38.497	2.3366	38.489	2.3371	11	28	1.3	504	2.5	0.324
16:	39.460	2.2818	39.476	2.2809	11	138	6.7	1516	7.6	0.198
17:	40.298	2.2362	40.301	2.2361	11	70	3.4	642	3.2	0.165
18:	42.440	2.1282	42.464	2.1270	5	85	4.1	1046	5.2	0.222
19:	45.760	1.9812	45.793	1.9799	6	62	3.0	875	4.4	0.254
20:	50.139	1.8179	50.164	1.8171	5	215	10.4	2880	14.4	0.241
21:	54.860	1.6721	54.895	1.6712	6	84	4.0	1683	8.4	0.361
22:	55.357	1.6583	55.327	1.6591	6	47	2.3	885	4.4	0.339
23:	59.940	1.5420	59.967	1.5414	5	150	7.2	2092	10.4	0.251
24:	62.417	1.4866	62.402	1.4869	6	19	0.9	395	2.0	0.374
25:	64.039	1.4528	64.063	1.4523	5	38	1.8	401	2.0	0.190
26:	65.819	1.4178	65.828	1.4176	5	10	0.5	132	0.7	0.238
27:	67.719	1.3825	67.749	1.3820	5	73	3.5	1253	6.3	0.309
28:	68.100	1.3757	68.128	1.3752	5	133	6.4	3561	17.8	0.482

* Intensity values are based on counts per second.

NOPI2591.MDI> 1/14/94 - NOPI-259-XRD1

40 Hits Sorted on Figure-Of-Merit

	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>() Quartz, syn - SiO2	+	33-1161	0.4	0.00	92	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>() Gismondine - CaAl2Si2O8·4H2O	+	20-452	3.7	0.06	64		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>() Moganite [NR] - SiO2		38-360	5.2	0.00	48		I ()	8.53	10.76	4.93	226	12	2.645
4>() Augelite - Al2(PO4)(OH)3	+	34-151	9.6	-0.06	39		I2/m (12)	12.15	8.01	5.08	247	4	2.687
5>() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	10.0	0.06	23		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
6>() Microcline, ordered - KAlSi3O8	+	19-926	10.3	-0.12	22		P-1 (2)	7.62	7.92	7.22	361	2	2.561
7>() Kehoeite [NR] - (Zn,Ca)Al2P2H6O1		27-94	10.6	0.00	52		P ()	13.45	13.45	13.45	2433	8	2.340
8>() Khademite - Al(SO4)(OH)·5H2O	+	26-1011	11.5	-0.06	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
9>() Despujolite - Ca3Mn(SO4)2(OH)6		20-226	11.7	0.06	64		P-62c (190)	8.56	8.56	10.76	683	2	2.546
10>() Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	13.1	-0.12	22		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
11>() Barbosalite - FeFe2(PO4)2(OH)2	+	33-668	13.4	0.06	39		P21/n (14)	7.40	7.49	7.31	356	2	3.652
12>() Sanidine, disordered - K(Si3Al)O	+	25-618	15.2	0.00	48		I2/m (12)	8.45	13.03	7.18	362	4	2.556
13>() Argentopyrite - AgFe2S3	+	38-459	15.3	-0.06	34		Pmmn (59)	6.64	11.46	6.45	491	4	4.271
14>() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	15.9	0.00	64		I4/m (87)	10.53	10.53	3.03	168	8	3.510
15>() Orthoclasite, barian - (K,Ba)(Si,A		19-3	17.4	0.00	48		I2/m (12)	8.50	13.06	7.20	365	4	
16>() Caminite - Mg3(SO4)2(OH)2	+	39-359	17.7	-0.06	39		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
17>() Lipscombite, manganoan - (Fe,Mn)	+	14-310	17.7	-0.12	34		P41212 (92)	7.40	7.40	12.81	701	4	3.660
18>() Tridymite-IT20H\RG, syn - SiO2		14-260	19.5	0.12	22		P ()	9.92	9.92	81.50	6946	160	2.298
19>() Alamosite - PbSiO3		29-782	23.1	0.06	64		Pn (7)	12.25	7.06	11.24	893	12	6.319
20>() Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	23.2	0.06	39		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
21>() Montmorillonite-21A - Na0.3(Al,M		29-1499	24.7	-0.06	2		P ()	5.21	5.21	22.00	517	1	
22>() Magnesium-zippeite - Mg2(UO2)6(S		29-876	27.9	0.12	3								3.300
23>() Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10-446	28.2	-0.12	3		Aa (9)	14.42	8.95	5.15	330	4	2.599
24>() Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	16-606	28.2	0.00	3		Aa (9)	14.61	5.15	8.91	329	4	2.602
25>() Celsian, syn - BaAl2Si2O8	+	38-1450	29.9	0.06	67		I2/m (12)	8.59	13.05	7.20	368	4	3.390
26>() Halloysite-7A - Al2Si2O5(OH)4		29-1487	32.3	0.00	2		P ()	5.13	5.13	7.16	163	1	2.624
27>() Chamosite-IT10#I#b\RG - (Fe,Al,		13-29	32.5	-0.12	4		B*** (65)	9.34	14.17	5.40	357	2	3.000
28>() Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	34.1	0.06	2		A*/ (12)	7.39	8.93	5.16	165	2	2.601
29>() Berthierine-IT1H\RG - (Fe,Al)3(		31-618	34.1	0.06	2		P ()	5.41	5.41	7.11	181	1	
30>() Heterosite - (Fe,Mn)PO4	+	34-134	34.1	0.00	5		Pmnb (62)	5.82	9.82	4.79	274	4	3.400
31>() Schoepite, syn - UO3·2H2O	+	29-1376	34.9	0.12	2		Pcab (61)	14.74	16.66	14.36	3526	32	4.853
32>() Berthierine-IT1M\RG - (Fe,Al)3(		7-315	35.6	-0.12	4		A2/m (12)	7.28	9.33	5.41	178	2	
33>() Epsomite, syn - MgSO4·7H2O	+	36-419	37.0	-0.12	18		P212121 (19)	11.87	11.98	6.85	974	4	1.681
>() Kaolinite-IT1A\RG - Al2Si2O5(OH	+	14-164	37.2	0.12	3		P-1 (2)	7.41	8.96	5.16	330	2	2.595
>() Diadochite - Fe2(PO4)(SO4)(OH)·5	+	42-1364	37.9	-0.06	2		P*, -1 (2)	9.58	9.75	7.34	585	2	2.326
36>() Orthoclase - KAlSi3O8	+	31-966	38.7	0.12	2		I2/m (12)	8.43	12.98	7.20	360	4	2.571
37>() Macaulayite - Fe24Si4O43(OH)2		42-596	38.7	0.06	3		A ()	36.34	8.73	5.04	798	2	4.523
38>() Krautite, syn - MnAsO3(OH)·H2O	+	29-888	39.8	0.06	2		P21 (4)	8.02	15.99	6.81	867	8	3.262
39>() Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	34-170	39.8	-0.12	2	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
40>() Pennantite-1\ITM#I#a\RG - (Mn5Al		29-884	39.8	0.00	3		A2/m (12)	14.40	9.50	5.45	370	2	3.184

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

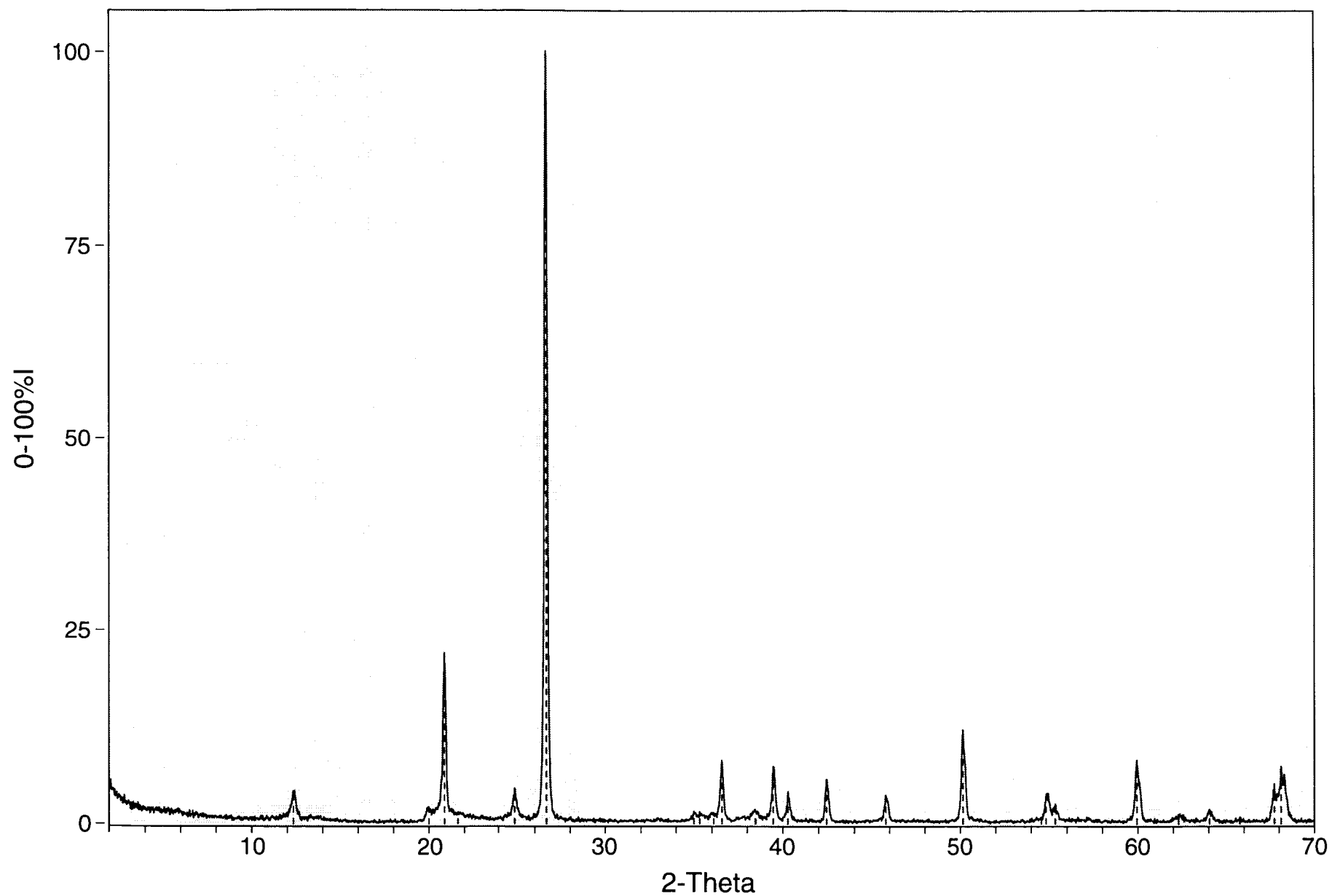
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/21/94 - NOPI-260-XRD1

File: NOPI2601.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

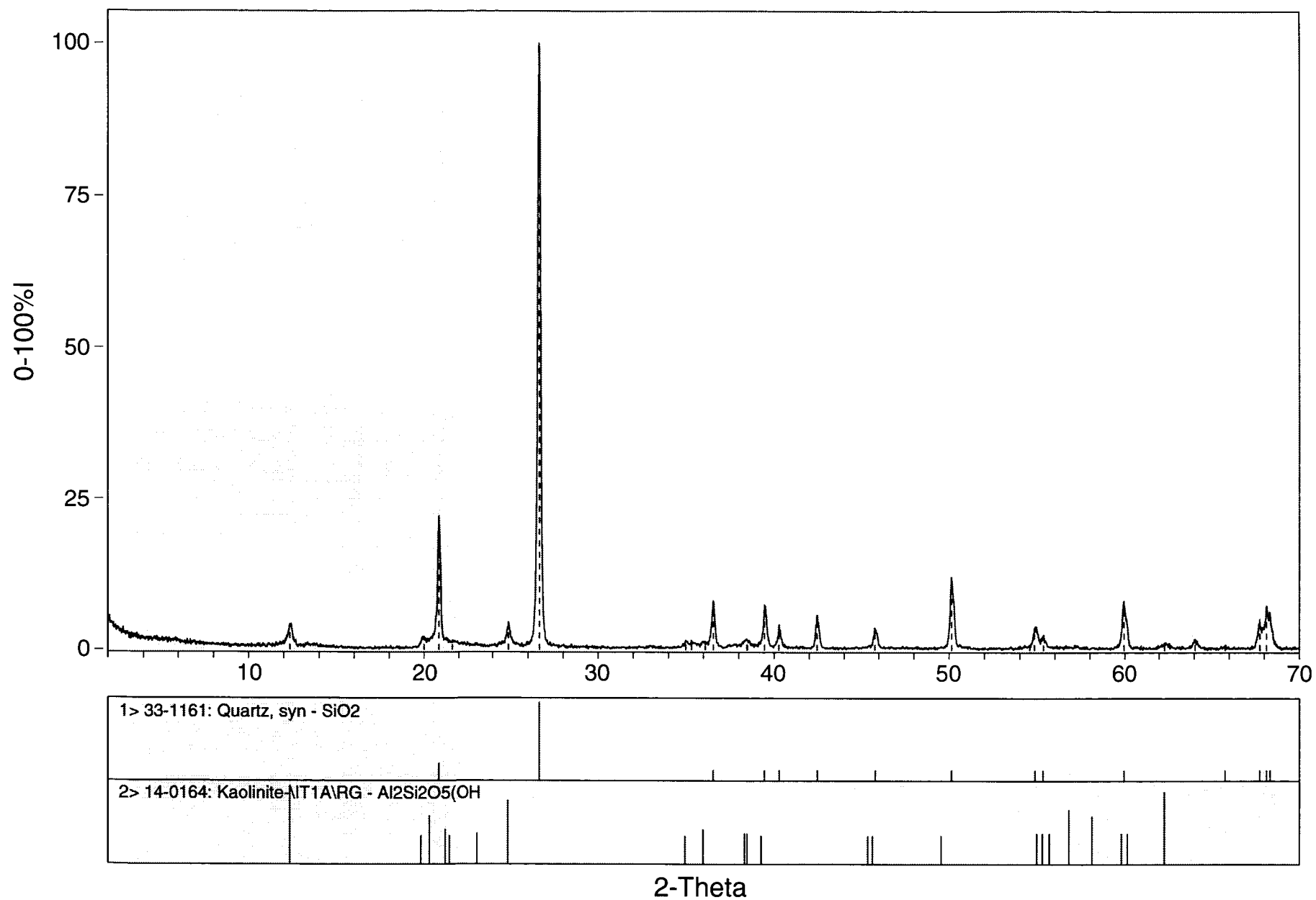


ID: 1/21/94 - NOPI-260-XRD1

File: NOPI2601.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Fri Jan 21 1994 @1:43pm

File: NOPI2601.MDI> 1/21/94 - NOPI-260-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           Filter length(pts) = 25
Scan Range = 2 - 70                Noise level(sigmas) = 2.0
Step Size  = .02                   Intensity cutoff(%) = .5-100
Count Time = 1 sec.                2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.335	7.1699	12.344	7.1645	11	79	4.0	1344	5.7	0.306
2:	19.991	4.4380	20.009	4.4340	11	35	1.8	647	2.8	0.333
3:	20.853	4.2564	20.854	4.2562	10	445	22.4	6585	28.1	0.266
4:	21.613	4.1085	21.599	4.1111	11	23	1.2	1123	4.8	0.879
5:	24.891	3.5743	24.892	3.5742	12	85	4.3	1259	5.4	0.267
6:	26.670	3.3398	26.648	3.3425	11	1991	100.0	23399	100.0	0.212
7:	34.992	2.5622	35.022	2.5601	8	26	1.3	327	1.4	0.226
8:	35.331	2.5384	35.323	2.5389	6	28	1.4	972	4.2	0.625
9:	36.108	2.4855	36.114	2.4851	7	29	1.5	1200	5.1	0.745
10:	36.569	2.4552	36.554	2.4562	8	160	8.0	1921	8.2	0.216
11:	38.449	2.3394	38.442	2.3398	10	30	1.5	519	2.2	0.311
12:	38.489	2.3371	38.465	2.3385	10	30	1.5	480	2.1	0.288
13:	39.451	2.2823	39.474	2.2810	11	143	7.2	1721	7.4	0.217
14:	40.271	2.2377	40.291	2.2366	11	74	3.7	702	3.0	0.171
15:	42.449	2.1277	42.462	2.1271	7	112	5.6	1250	5.3	0.201
16:	45.770	1.9808	45.799	1.9796	7	77	3.9	913	3.9	0.213
17:	50.149	1.8176	50.168	1.8170	5	243	12.2	3253	13.9	0.241
18:	54.569	1.6804	54.578	1.6801	5	17	0.9	336	1.4	0.356
19:	54.829	1.6730	54.883	1.6715	6	75	3.8	1946	8.3	0.467
20:	55.346	1.6586	55.308	1.6597	6	48	2.4	793	3.4	0.297
21:	59.947	1.5418	59.975	1.5412	5	161	8.1	2467	10.5	0.276
22:	62.307	1.4890	62.324	1.4886	6	23	1.2	403	1.7	0.315
23:	64.045	1.4527	64.056	1.4525	6	33	1.7	459	2.0	0.250
24:	65.766	1.4188	65.765	1.4188	5	15	0.8	118	0.5	0.142
25:	67.745	1.3821	67.793	1.3812	5	105	5.3	2367	10.1	0.406
26:	68.125	1.3753	68.145	1.3749	5	153	7.7	4198	17.9	0.494

* Intensity values are based on counts per second.

NOPI2601.MDI> 1/21/94 - NOPI-260-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>()	Quartz, syn - SiO2	+	33-1161	0.3	0.00	97	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.6
2>()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.6	0.06	74		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>()	Moganite [NR] - SiO2		38- 360	5.2	-0.06	96		I ()	8.53	10.76	4.93	226	12	2.645
4>()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	6.0	-0.12	20		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
5>()	Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	11.9	0.06	74		P-62c (190)	8.56	8.56	10.76	683	2	2.546
6>()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	12.1	0.06	21		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
7>()	Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	13.6	-0.06	99		I4/m (87)	10.53	10.53	3.03	168	8	3.510
8>()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	13.8	-0.06	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
9>()	Sanidine, disordered - K(Si3Al)O	+	25- 618	20.8	-0.12	90		I2/m (12)	8.45	13.03	7.18	362	4	2.556
10>()	Dickite-IT2M#1\RG - Al2Si2O5(OH)	+	10- 446	21.3	-0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
11>()	Nontronite-15A - Na0.3Fe2Si4O10(		29-1497	24.7	0.06	2		P ()	5.21	5.21	14.88	350	1	2.359
12>()	Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	26.1	0.06	11								2.590
13>()	Kaolinite-IT1A\RG - Al2Si2O5(OH)	+	14- 164	26.8	0.06	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
14>()	Montmorillonite-17A - Ca0.2Al2Si		19- 150	27.9	0.12	2		P ()	5.18	5.18	17.58	409	1	1.936
15>()	Halloysite-7A - Al2Si2O5(OH)4		29-1487	28.5	0.00	2		P ()	5.13	5.13	7.16	163	1	2.624
16>()	Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	29.5	0.12	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
17>()	Halloysite-7A - Al2Si2O5(OH)4		9- 453	30.4	-0.12	2		P ()	5.12	5.12	7.30	166	1	2.582
18>()	Macaulayite - Fe24Si4O43(OH)2		42-596	31.0	0.12	3		A ()	36.34	8.73	5.04	798	2	4.523
19>()	Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	32.5	-0.06	4		A*/* (12)	7.39	8.93	5.16	165	2	2.601
20>()	Microcline, ordered - KAlSi3O8	+	19- 926	32.5	-0.06	11		P-1 (2)	7.62	7.92	7.22	361	2	2.561
21>()	Alamosite - PbSiO3		29- 782	33.0	0.06	74		Pn (7)	12.25	7.06	11.24	893	12	6.319
22>()	Paragonite-IT2M#1\RG - NaAl2(Al	+	12- 165	35.6	0.00	2		A2/a (15)	19.42	8.94	5.15	445	4	2.851
23>()	Baileychlore-1\ITM#I#b\RG - (Zn5	+	42-1335	38.7	-0.12	3		A2/m (12)	14.39	9.25	5.34	353	2	3.581
24>()	Pennantite-1\ITM#I#a\RG - (Mn5Al		29- 884	39.8	0.00	4		A2/m (12)	14.40	9.50	5.45	370	2	3.184
25>()	Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	34- 170	39.8	0.00	4	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
26>()	Berthierine-IT1H\RG - (Fe,Al)3(		31- 618	40.3	-0.12	4		P ()	5.41	5.41	7.11	181	1	
27>()	Berthierine-IT1M\RG - (Fe,Al)3(		7- 315	43.4	-0.06	3		A2/m (12)	7.28	9.33	5.41	178	2	
28>()	Kenyaite - NaSi11O20.5(OH)4·3H2O		20-1157	43.6	0.12	2		P ()	7.79	19.72	6.91	1056	2	2.460
29>()	Vandendriesscheite - PbU7O22·12H		13- 117	45.5	0.12	4		P*c* (51)	40.85	43.33	14.07	>9999	36	5.861
30>()	Cronstedtite-IT1M\RG - Fe3(Si,F	+	17- 470	45.5	0.06	2		Am (8)	7.32	9.51	5.49	185	2	3.340
31>()	Arsenuranospathite - HAl(UO2)4(A		31- 586	45.5	-0.06	2		P42/n (86)	7.16	7.16	30.37	1557	1	2.543
32>()	Fourmarierite - PbU4O13·4H2O	+	13- 116	45.5	0.06	4		B**b (63)	14.39	16.47	14.00	1659	8	5.763
33>()	Wuelfingite - Zn(OH)2	+	38- 385	47.4	-0.12	2		P212121 (19)	5.16	8.49	4.92	215	4	3.064
34>()	Bianchite - (Zn,Fe)SO4·6H2O	+	12- 16	47.4	-0.12	2		A2/a (15)	24.49	7.20	10.10	881	8	2.6
35>()	Tosudite - Na0.3Al6(Si,Al)8O20(O		22- 956	47.4	0.06	3		P ()	5.12	5.12	29.78	677	1	2.6
36>()	Goethite - FeO(OH)	+	29- 713	47.4	0.06	2		Phnm (62)	4.61	9.96	3.02	139	4	4.258
37>()	Fraipontite-IT2M#1\RG - (Zn,Al)		14- 366	49.3	-0.12	2		A*/* (12)	14.12	9.21	5.34	347	4	
38>()	Vertumnite - Ca4Al4Si4O6(OH)24·3		29- 291	49.3	0.00	2		P21/* (11)	5.77	25.12	5.74	723	1	2.158
39>()	Rectorite - K1.2Al4Si8O20(OH)4·4		29-1495	49.3	0.00	2		P ()	5.16	5.16	25.57	589	1	2.366
40>()	Wattevilleite - Na2Ca(SO4)2·4H2O		41-1360	49.3	0.00	2								1.81

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

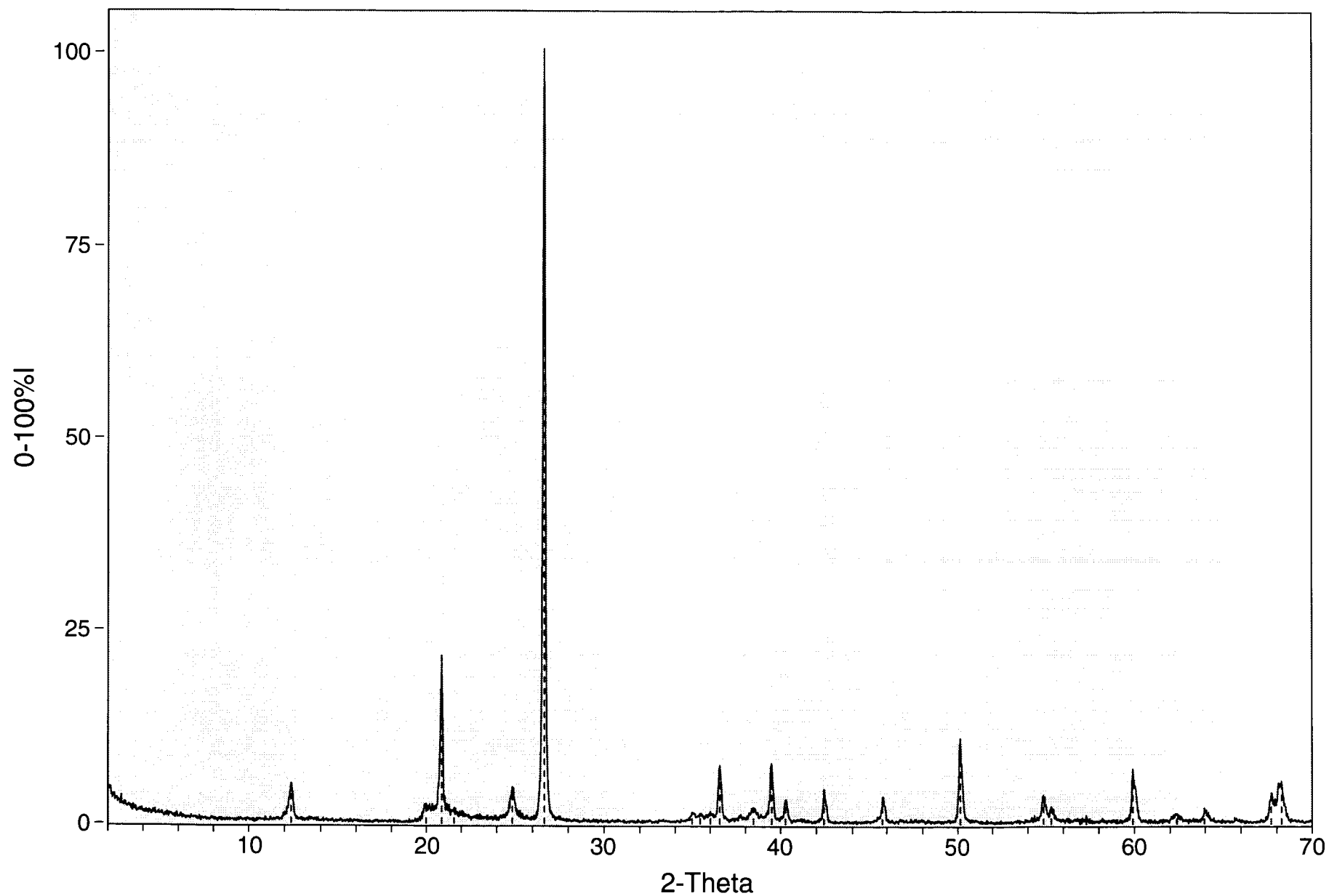
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/21/94 - NOPI-261-XRD1

File: NOPI2611.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

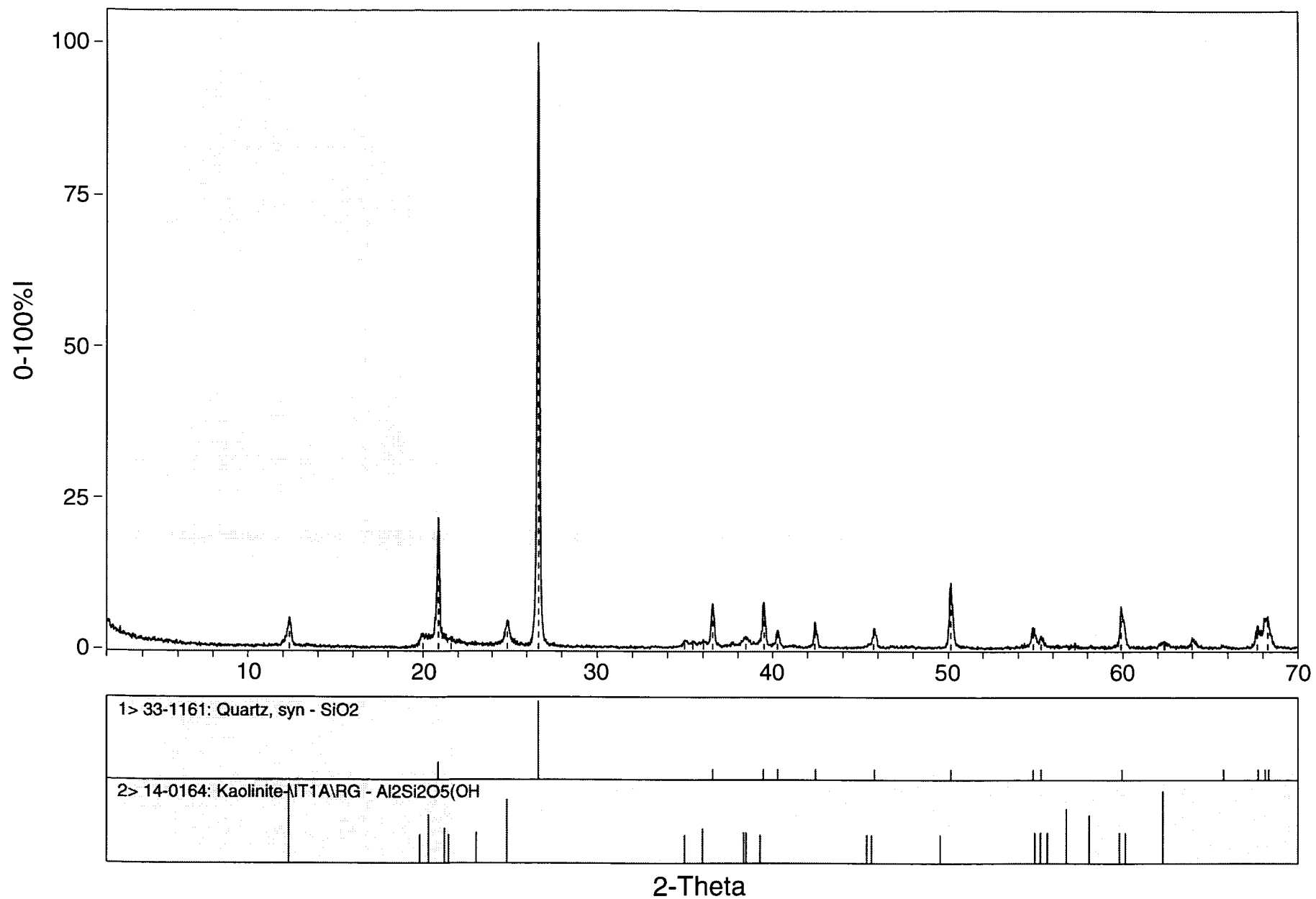


ID: 1/21/94 - NOPI-261-XRD1

File: NOPI2611.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Fri Jan 21 1994 @1:47pm

File: NOPI2611.MDI> 1/21/94 - NOPI-261-XRD1

----- Scan Parameters: -----		----- Search Parameters: -----	
Radiation = CU_1.540598		Filter length(pts) = 25	
Scan Range = 2 - 70		Noise level(sigmas) = 2.0	
Step Size = .02		Intensity cutoff(%) = .5-100	
Count Time = 1 sec.		2-Theta Zero (deg) = 0	

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.365	7.1528	12.347	7.1628	8	108	4.9	1528	7.2	0.255
2:	19.980	4.4404	20.012	4.4334	12	44	2.0	1061	5.0	0.434
3:	20.879	4.2512	20.859	4.2552	11	462	21.0	7025	33.3	0.274
4:	21.579	4.1148	21.551	4.1202	14	31	1.4	1269	6.0	0.737
5:	24.878	3.5761	24.879	3.5760	13	91	4.1	1645	7.8	0.325
6:	26.656	3.3415	26.645	3.3428	11	2195	100.0	21092	100.0	0.173
7:	34.955	2.5648	34.989	2.5624	8	30	1.4	361	1.7	0.217
8:	35.413	2.5327	35.405	2.5332	7	25	1.1	1267	6.0	0.912
9:	36.012	2.4919	36.011	2.4920	8	29	1.3	1429	6.8	0.887
10:	36.551	2.4564	36.550	2.4565	9	167	7.6	1954	9.3	0.211
11:	38.450	2.3393	38.448	2.3395	11	40	1.8	801	3.8	0.360
12:	39.489	2.2801	39.476	2.2809	10	166	7.6	1793	8.5	0.194
13:	40.271	2.2377	40.286	2.2369	12	63	2.9	616	2.9	0.176
14:	42.430	2.1287	42.457	2.1274	5	107	4.9	1062	5.0	0.179
15:	45.749	1.9817	45.774	1.9806	5	78	3.6	1016	4.8	0.234
16:	50.144	1.8178	50.159	1.8173	5	241	11.0	2879	13.6	0.215
17:	54.862	1.6721	54.887	1.6714	6	77	3.5	1833	8.7	0.428
18:	55.323	1.6593	55.296	1.6600	7	43	2.0	1057	5.0	0.442
19:	57.280	1.6071	57.277	1.6072	5	21	1.0	154	0.7	0.132
20:	59.901	1.5429	59.954	1.5417	5	152	6.9	2239	10.6	0.265
21:	62.377	1.4875	62.363	1.4878	7	24	1.1	496	2.4	0.372
22:	62.416	1.4867	62.388	1.4873	7	24	1.1	469	2.2	0.352
23:	63.959	1.4545	63.984	1.4539	8	38	1.7	342	1.6	0.162
24:	67.695	1.3830	67.743	1.3821	4	85	3.9	3201	15.2	0.678
25:	68.272	1.3727	68.234	1.3734	4	124	5.6	4084	19.4	0.593

* Intensity values are based on counts per second.

NOPI2611.MDI> 1/21/94 - NOPI-261-XRD1

40 Hits Sorted on Figure-Of-Merit													QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>()	Quartz, syn	- SiO ₂	+	33-1161	0.4	0.00	96	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.1										
2>()	Gismondine	- CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.7	0.06	58		P21/c (14)	10.02	10.61	9.84	1046	4	2.224										
3>()	Moganite [NR]	- SiO ₂		38- 360	5.7	0.00	42		I ()	8.53	10.76	4.93	226	12	2.645										
4>()	Despujolsite	- Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	10.8	0.06	58		P-62c (190)	8.56	8.56	10.76	683	2	2.546										
5>()	Kaolinite-IT1A\RG	- Al ₂ Si ₂ O ₅ (OH)	+	14- 164	14.6	0.06	5		P-1 (2)	7.41	8.96	5.16	330	2	2.595										
6>()	Akaganeite-ITM\RG	- syn - FeO(OH)		34-1266	16.8	0.00	58		I4/m (87)	10.53	10.53	3.03	168	8	3.510										
7>()	Dickite-IT2M#1\RG	- Al ₂ Si ₂ O ₅ (OH)	+	10- 446	17.8	0.00	5		Aa (9)	14.42	8.95	5.15	330	4	2.599										
8>()	Tamarugite	- NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	20.6	- .12	18		P21/m (11)	7.35	25.23	6.10	1126	4	2.065										
9>()	Tungusite	- Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	23.0	0.00	10								2.590										
10>()	Sanidine, disordered	- K(Si ₃ Al)O	+	25- 618	24.4	- .06	88		I2/m (12)	8.45	13.03	7.18	362	4	2.556										
11>()	Kaolinite-IT1Md\RG	- Al ₂ Si ₂ O ₅ (O		29-1488	26.3	- .12	4		A*/ (12)	7.39	8.93	5.16	165	2	2.601										
12>()	Nacrite-IT2M#2\RG	- Al ₂ Si ₂ O ₅ (OH)	+	16- 606	28.2	0.12	4		Aa (9)	14.61	5.15	8.91	329	4	2.602										
13>()	Halloysite-7A	- Al ₂ Si ₂ O ₅ (OH) ₄		9- 453	30.4	- .12	2		P ()	5.12	5.12	7.30	166	1	2.582										
14>()	Halloysite-7A	- Al ₂ Si ₂ O ₅ (OH) ₄		29-1487	30.4	- .12	2		P ()	5.13	5.13	7.16	163	1	2.624										
15>()	Macaulayite	- Fe ₂₄ Si ₄ O ₄₃ (OH) ₂		42- 596	31.0	0.00	3		A ()	36.34	8.73	5.04	798	2	4.523										
16>()	Baileychlore-1\ITM#I#b\RG	- (Zn ₅	+	42-1335	32.2	0.00	5		A2/m (12)	14.39	9.25	5.34	353	2	3.581										
17>()	Alamosite	- PbSiO ₃		29- 782	34.9	0.06	58		Pn (7)	12.25	7.06	11.24	893	12	6.319										
18>()	Khademite	- Al(SO ₄)(OH)·5H ₂ O	+	26-1011	36.0	- .12	10		Pcab (61)	11.18	13.06	10.89	1589	8	1.924										
19>()	Berthierine-IT1M\RG	- (Fe,Al) ₃ (		7- 315	37.2	- .12	4		A2/m (12)	7.28	9.33	5.41	178	2											
20>()	Nacrite-IT2M#2\RG	- Al ₂ Si ₂ O ₅ (OH)	+	34- 170	37.9	0.12	4	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602										
21>()	Quenstedtite	- Fe ₂ (SO ₄) ₃ ·11H ₂ O	+	28- 496	37.9	0.06	2		P-1 (2)	6.54	23.60	6.18	924	2	2.149										
22>()	Paragonite-IT2M#1\RG	- NaAl ₂ (Al	+	12- 165	38.7	0.00	2		A2/a (15)	19.42	8.94	5.15	445	4	2.851										
23>()	Cronstedtite-IT1M\RG	- Fe ₃ (Si,F	+	17- 470	39.8	- .12	5		Am (8)	7.32	9.51	5.49	185	2	3.340										
24>()	Rectorite	- K _{1.2} Al ₄ Si ₈ O ₂₀ (OH) ₄ ·4		29-1495	39.8	- .06	2		P ()	5.16	5.16	25.57	589	1	2.366										
25>()	Berthierine-IT1H\RG	- (Fe,Al) ₃ (		31- 618	40.3	0.06	3		P ()	5.41	5.41	7.11	181	1											
26>()	Pennantite-1\ITM#I#a\RG	- (Mn ₅ Al		29- 884	41.7	0.00	4		A2/m (12)	14.40	9.50	5.45	370	2	3.184										
27>()	Illite-1\ITM\RG	- K _{0.7} Al ₂ (Si,Al)		29-1496	41.7	0.12	2	0.7	A2/m (12)	10.18	8.95	5.20	232	2	2.600										
28>()	Rostite	- Al(SO ₄)(OH)·5H ₂ O	+	41-1382	42.1	0.00	15		Pcab (61)	11.19	13.06	10.89	1591	8	1.921										
29>()	Goethite	- FeO(OH)	+	29- 713	43.6	0.00	2		Pbnm (62)	4.61	9.96	3.02	139	4	4.258										
30>()	Wattevilleite	- Na ₂ Ca(SO ₄) ₂ ·4H ₂ O		41-1360	43.6	- .12	2								1.810										
31>()	Bilinite	- FeFe ₂ (SO ₄) ₄ ·22H ₂ O		25-1153	43.6	- .06	2		P21/n (14)	21.05	24.33	6.21	3159	4	1.993										
32>()	Zinc-zippeite, syn	- Zn ₂ (UO ₂) ₆ (S		29-1395	43.6	- .12	5								3.300										
33>()	Fourmarierite	- PbU ₄ O ₁₃ ·4H ₂ O	+	13- 116	45.5	0.12	5		B**b (63)	14.39	16.47	14.00	1659	8	5.763										
34>()	Quenstedtite	- Fe ₂ (SO ₄) ₃ ·10H ₂ O		17- 160	47.4	- .06	2		P-1 (2)	6.56	23.77	6.15	929	2	2.										
35>()	Ramsdellite	- MnO ₂	+	39- 375	47.4	- .12	2		Pbnm (62)	4.53	9.27	2.87	120	4	4.										
36>()	Vandendriesscheite	- PbU ₇ O ₂₂ ·12H		13- 117	49.3	0.12	4		P*c* (51)	40.85	43.33	14.07	>9999	36	5.861										
37>()	Bianchite	- (Zn,Fe)SO ₄ ·6H ₂ O	+	12- 16	49.3	- .12	2		A2/a (15)	24.49	7.20	10.10	881	8	2.030										
38>()	Tosudite	- Na _{0.3} Al ₆ (Si,Al) ₈ O ₂₀ (O		22- 956	49.3	- .06	2		P ()	5.12	5.12	29.78	677	1	2.420										
39>()	Cerussite, syn	- PbCO ₃	+	5- 417	49.3	- .12	2		Pnam (62)	6.14	8.50	5.18	271	4	6.555										
40>()	Laumontite, syn	- CaAl ₂ Si ₄ O ₁₂ ·4H	+	26-1047	51.2	- .06	2		Im (8)	13.83	13.08	7.56	677	4	2.309										

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

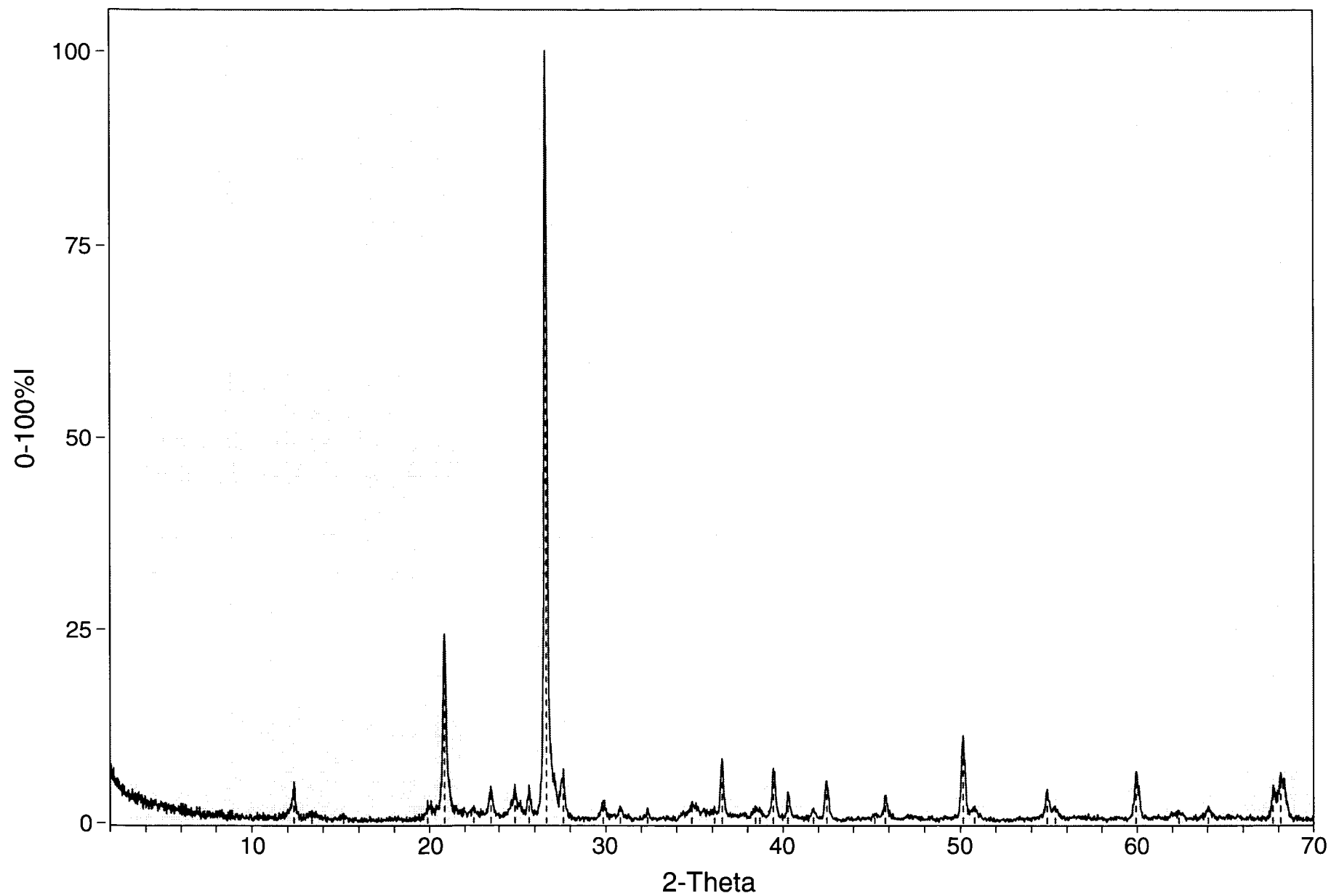
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/21/94 - NOPI-262-XRD1

File: NOPI2621.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

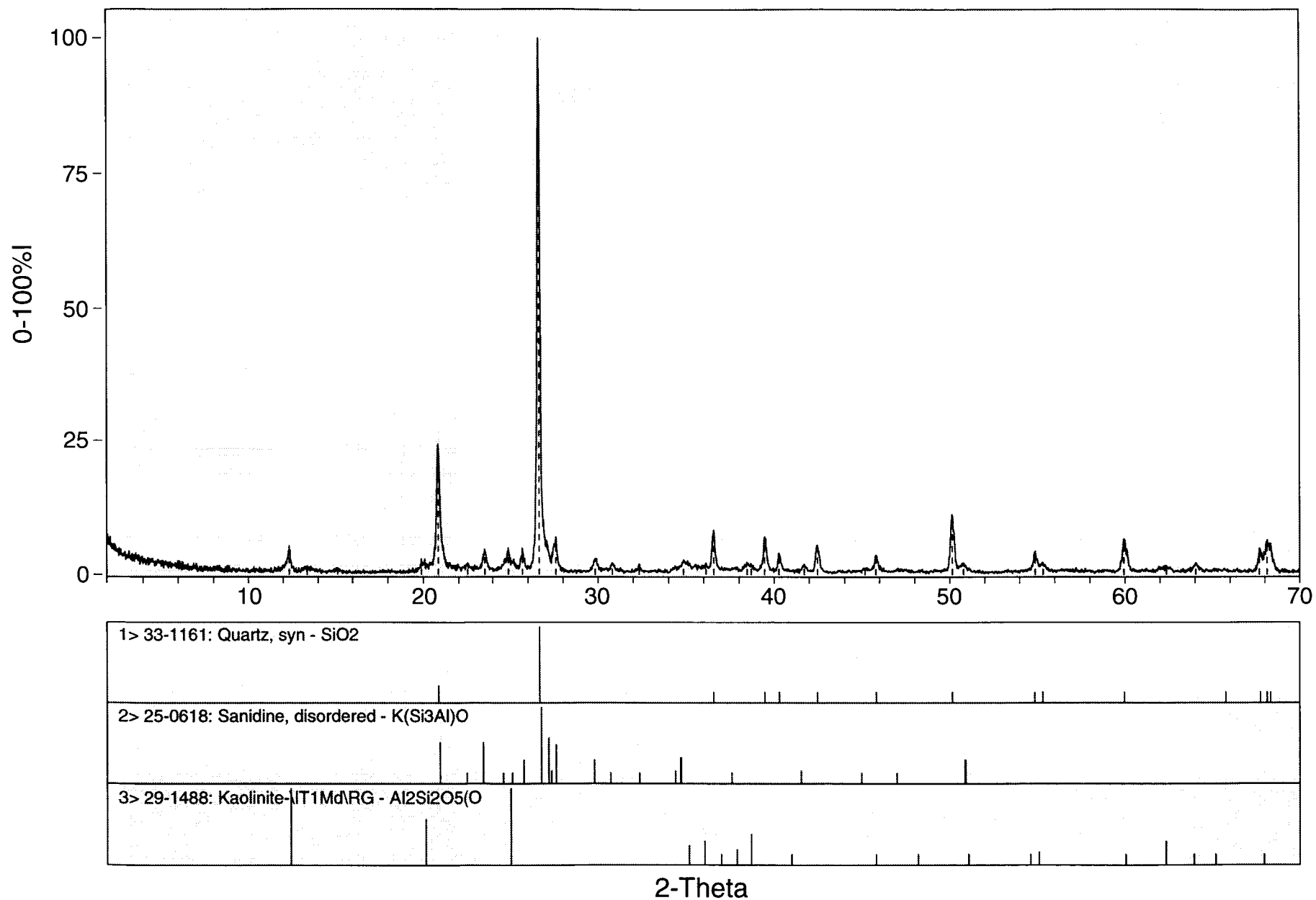


ID: 1/21/94 - NOPI-262-XRD1

File: NOPI2621.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Fri Jan 21 1994 @1:59pm

File: NOPI2621.MDI> 1/21/94 - NOPI-262-XRD1

----- Scan Parameters: -----		----- Search Parameters: -----	
Radiation = CU_1.540598		Filter length(pts) = 25	
Scan Range = 2 - 70		Noise level(sigmas) = 2.0	
Step Size = .02		Intensity cutoff(%) = .5-100	
Count Time = 1 sec.		2-Theta Zero (deg) = 0	

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.360	7.1554	12.332	7.1715	7	68	4.9	851	5.4	0.225
2:	13.379	6.6128	13.384	6.6103	7	17	1.2	265	1.7	0.281
3:	15.142	5.8466	15.136	5.8489	5	14	1.0	150	1.0	0.193
4:	19.884	4.4615	19.927	4.4521	9	34	2.5	373	2.4	0.197
5:	20.844	4.2583	20.856	4.2557	11	329	23.9	4875	31.0	0.267
6:	22.543	3.9410	22.538	3.9418	14	19	1.4	150	1.0	0.142
7:	23.544	3.7757	23.546	3.7753	14	54	3.9	599	3.8	0.200
8:	24.884	3.5753	24.875	3.5766	13	59	4.3	950	6.0	0.290
9:	25.684	3.4657	25.681	3.4661	16	56	4.1	450	2.9	0.145
10:	26.644	3.3430	26.640	3.3434	14	1375	100.0	15707	100.0	0.206
11:	27.603	3.2290	27.559	3.2340	9	91	6.6	1418	9.0	0.280
12:	29.846	2.9912	29.848	2.9911	7	35	2.5	529	3.4	0.272
13:	30.807	2.9001	30.819	2.8990	7	25	1.8	317	2.0	0.228
14:	32.346	2.7655	32.338	2.7662	6	23	1.7	196	1.2	0.153
15:	34.847	2.5725	34.868	2.5710	8	31	2.3	1072	6.8	0.622
16:	36.126	2.4843	36.121	2.4846	10	24	1.7	741	4.7	0.556
17:	36.566	2.4554	36.560	2.4558	15	104	7.6	1047	6.7	0.181
18:	38.448	2.3395	38.475	2.3379	10	24	1.7	374	2.4	0.280
19:	38.686	2.3256	38.659	2.3272	10	25	1.8	237	1.5	0.171
20:	39.450	2.2824	39.471	2.2811	9	96	7.0	1120	7.1	0.210
21:	40.270	2.2377	40.291	2.2366	9	53	3.9	438	2.8	0.149
22:	41.728	2.1628	41.725	2.1630	7	24	1.7	253	1.6	0.190
23:	42.468	2.1268	42.476	2.1265	7	71	5.2	887	5.6	0.225
24:	45.170	2.0057	45.188	2.0050	6	15	1.1	153	1.0	0.184
25:	45.790	1.9800	45.803	1.9794	7	48	3.5	604	3.8	0.226
26:	50.151	1.8176	50.157	1.8174	5	155	11.3	2824	18.0	0.328
27:	50.790	1.7962	50.772	1.7968	5	29	2.1	611	3.9	0.379
28:	54.892	1.6713	54.908	1.6708	7	57	4.1	987	6.3	0.312
29:	55.351	1.6585	55.316	1.6594	7	26	1.9	454	2.9	0.314
30:	59.934	1.5421	59.967	1.5414	7	88	6.4	1323	8.4	0.271
31:	62.373	1.4876	62.371	1.4876	8	18	1.3	278	1.8	0.278
32:	64.034	1.4529	64.045	1.4527	7	28	2.0	369	2.3	0.237
33:	67.696	1.3830	67.756	1.3819	6	64	4.7	1012	6.4	0.285
34:	68.135	1.3751	68.155	1.3748	6	88	6.4	2628	16.7	0.538

* Intensity values are based on counts per second.

NOPI2621.MDI> 1/21/94 - NOPI-262-XRD1

40 Hits Sorted on	Figure-Of-Merit	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>()	Quartz, syn - SiO2	+	33-1161	0.3	0.00	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.8
2>()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.6	0.06	59		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>()	Sanidine, disordered - K(Si3Al)O	+	25- 618	3.8	0.00	44		I2/m (12)	8.45	13.03	7.18	362	4	2.556
4>()	Moganite [NR] - SiO2		38- 360	4.5	-0.06	87		I ()	8.53	10.76	4.93	226	12	2.645
5>()	Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	5.3	0.06	59		A2/a (15)	20.16	9.00	5.19	469	4	2.790
6>()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	5.9	-1.12	20		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
7>()	Microcline, ordered - KAlSi3O8	+	19- 926	7.2	-1.12	20		P-1 (2)	7.62	7.92	7.22	361	2	2.561
8>()	Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	7.8	0.06	59		P-62c (190)	8.56	8.56	10.76	683	2	2.546
9>()	Orthoclase - KAlSi3O8	+	31- 966	9.0	-0.06	11		I2/m (12)	8.43	12.98	7.20	360	4	2.571
10>()	Lanarkite, syn - Pb2OSO4	+	37- 516	9.0	-0.06	72		I2/m (12)	12.43	5.70	7.08	250	4	6.999
11>()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	10.1	0.00	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
12>()	Tridymite-IT20H\RG, syn - SiO2		14- 260	10.7	0.12	20		P ()	9.92	9.92	81.50	6946	160	2.298
13>()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	12.1	0.00	22		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
14>()	Sidwillite - MoO3·2H2O	+	39- 363	12.6	-0.06	44		P21/n (14)	10.62	13.82	10.48	1538	16	3.109
15>()	Lanarkite, syn - Pb2(SO4)O	+	33-1486	13.5	-0.06	72		I2/m (12)	12.42	5.70	7.07	249	4	7.019
16>()	Alamosite - PbSiO3		29- 782	15.7	0.06	59		Pn (7)	12.25	7.06	11.24	893	12	6.319
17>()	Montmorillonite-17A - Ca0.2Al2Si		19- 150	17.9	0.12	2		P ()	5.18	5.18	17.58	409	1	1.936
18>()	Wollastonite-IT1A\RG - CaSiO3		27-1064	18.8	0.00	10		P-1 (2)	7.33	7.93	7.07	399	6	2.903
19>()	Krautite, syn - MnAsO3(OH)·H2O	+	29- 888	18.8	-1.12	10		P21 (4)	8.02	15.99	6.81	867	8	3.262
20>()	Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	19.3	0.00	59		I4/m (87)	10.53	10.53	3.03	168	8	3.510
21>()	Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	19.9	0.00	11								2.590
22>()	Halloysite-7A - Al2Si2O5(OH)4		29-1487	20.9	0.00	2		P ()	5.13	5.13	7.16	163	1	2.624
23>()	Tuhualite - (Na,K)2Fe4Si12O30·H2		10- 440	21.5	0.00	4		Cmca (64)	14.31	17.28	10.11	1250	4	2.890
24>()	Leucite - KAlSi2O6		15- 47	23.7	-1.12	5		I41/a (88)	13.06	13.06	13.75	1173	16	2.472
25>()	Potassium alum, syn - KAl(SO4)2·	+	7- 17	24.5	0.12	14		Pa3 (205)	12.16	12.16	12.16	1797	4	1.754
26>()	Sanidine - (K,Na)(Si3Al)O8		19-1227	25.2	0.12	5		I2/m (12)	8.32	13.00	7.17	353	4	
27>()	Tsumcorite - FePbZn(AsO4)2·H2O	+	25- 399	26.3	0.06	5		I2/m (12)	9.04	6.33	7.58	198	2	5.236
28>()	Ojuelaite - ZnFe2(AsO4)2(OH)2·4H	+	35- 516	27.7	-1.12	14		P21/c (14)	10.25	9.66	5.57	550	2	3.388
29>()	Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	27.9	-0.06	4		A*/ (12)	7.39	8.93	5.16	165	2	2.601
30>()	Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10- 446	28.2	0.06	3		Aa (9)	14.42	8.95	5.15	330	4	2.599
31>()	Pumpellyite-(Fe''') - Ca2FeAl2(S		39-1368	28.2	0.12	2		C2/m (12)	19.13	5.95	8.82	498	4	3.352
32>()	Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	16- 606	28.2	0.12	3		Aa (9)	14.61	5.15	8.91	329	4	2.602
33>()	Moissanite-4ITH\RG, syn - SiC	+	22-1317	28.2	0.06	2		P63mc (186)	3.07	3.07	10.05	82	2	1.620
34>()	Gismondine - CaAl2Si2O8·4H2O	+	39-1373	28.3	0.00	17		P21/c (14)	10.02	10.64	9.84	1047	4	2.
35>()	Halloysite-7A - Al2Si2O5(OH)4		9- 453	28.5	-1.12	2		P ()	5.12	5.12	7.30	166	1	2.
36>()	Berthierine-IT1H\RG - (Fe,Al)3(		31- 618	28.8	-1.12	4		P ()	5.41	5.41	7.11	181	1	
37>()	Baumhauerite - Pb3As4S9	+	12- 281	28.8	0.06	2		P-1 (2)	8.33	22.91	7.96	1507	4	5.334
38>()	Alunite - KAl3(SO4)2(OH)6	+	14- 136	29.5	-1.12	2		R3m (160)	6.98	6.98	17.32	244	3	2.822
39>()	Arsenbrackebuschite - Pb2(Fe,Zn)		29-1428	29.5	0.12	3		P21/m (11)	9.02	6.05	7.76	391	2	
40>()	Microcline, intermediate - KAlSi	+	22- 675	30.0	0.00	6		P-1 (2)	7.72	7.82	7.21	360	2	2.565

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

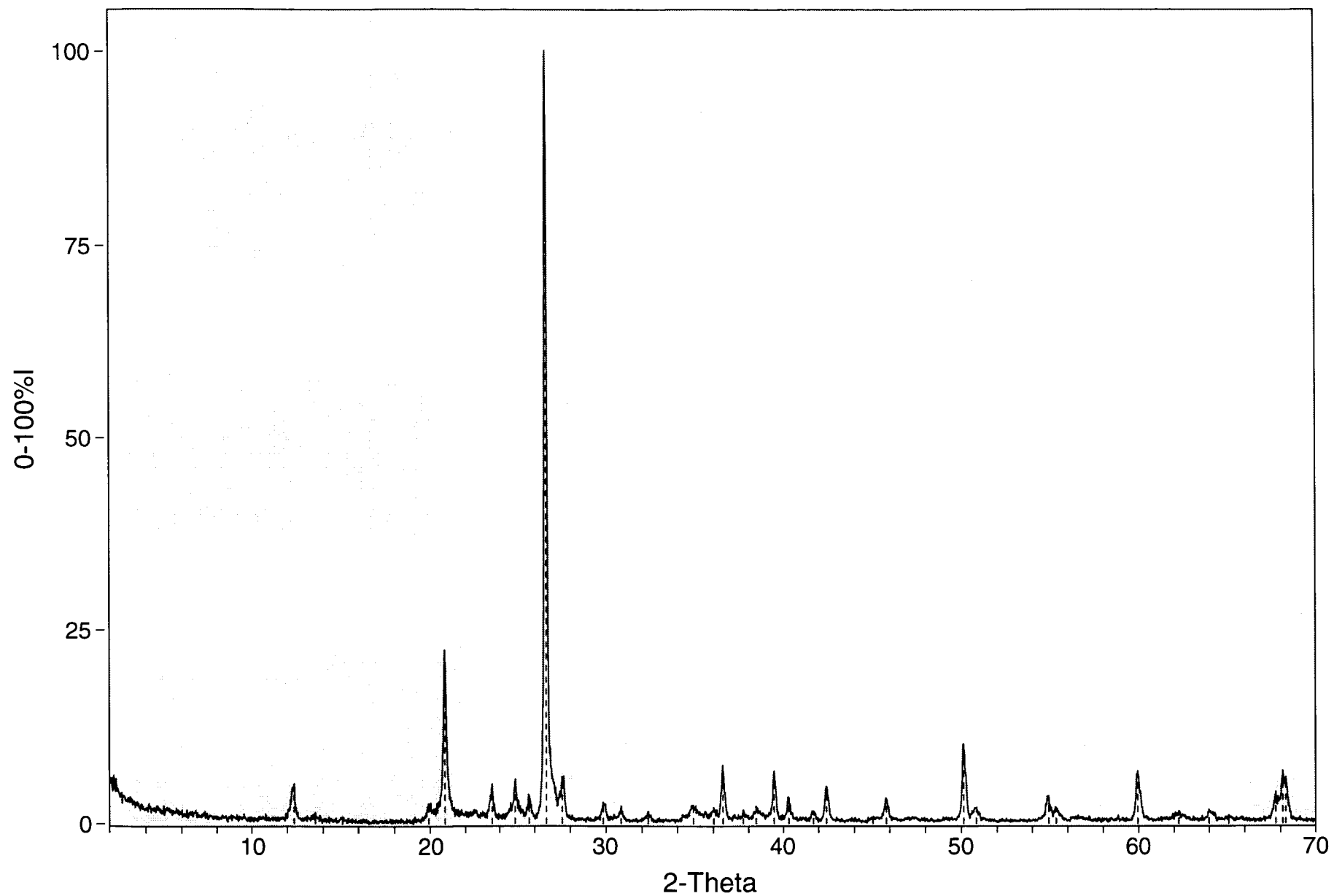
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-263-XRD1

File: NOPI2631.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2631.MDI> 1/25/94 - NOPI-263-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598

Scan Range = 2 - 70

Step Size = .02

Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25

Noise level(sigmas) = 2.0

Intensity cutoff(%) = .5-100

2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.394	7.1359	12.341	7.1665	8	82	4.9	1125	6.2	0.247
2:	13.577	6.5167	13.564	6.5227	7	20	1.2	213	1.2	0.192
3:	15.097	5.8640	15.088	5.8673	5	12	0.7	98	0.5	0.147
4:	19.922	4.4531	19.918	4.4541	9	35	2.1	325	1.8	0.167
5:	20.841	4.2589	20.853	4.2565	10	367	21.9	5965	32.7	0.293
6:	23.579	3.7701	23.556	3.7737	14	72	4.3	680	3.7	0.170
7:	24.901	3.5729	24.896	3.5735	14	83	5.0	1293	7.1	0.280
8:	25.684	3.4657	25.692	3.4647	14	49	2.9	452	2.5	0.166
9:	26.641	3.3433	26.639	3.3436	13	1672	100.0	18264	100.0	0.197
10:	27.543	3.2358	27.527	3.2377	10	94	5.6	1675	9.2	0.321
11:	29.845	2.9913	29.865	2.9894	7	40	2.4	565	3.1	0.254
12:	30.843	2.8968	30.829	2.8980	6	35	2.1	358	2.0	0.184
13:	32.365	2.7640	32.358	2.7645	6	22	1.3	237	1.3	0.194
14:	34.884	2.5699	34.889	2.5696	8	35	2.1	1092	6.0	0.562
15:	36.025	2.4910	36.035	2.4904	10	29	1.7	979	5.4	0.608
16:	36.545	2.4568	36.552	2.4564	12	118	7.1	1286	7.0	0.196
17:	37.706	2.3838	37.711	2.3835	11	20	1.2	129	0.7	0.116
18:	38.426	2.3408	38.444	2.3397	11	31	1.9	301	1.6	0.175
19:	39.448	2.2824	39.461	2.2817	10	113	6.8	1220	6.7	0.194
20:	40.305	2.2358	40.300	2.2361	11	50	3.0	493	2.7	0.177
21:	41.706	2.1639	41.700	2.1642	7	25	1.5	256	1.4	0.184
22:	42.447	2.1278	42.457	2.1274	7	80	4.8	932	5.1	0.210
23:	45.068	2.0100	45.092	2.0090	4	15	0.9	256	1.4	0.307
24:	45.808	1.9792	45.800	1.9796	6	52	3.1	699	3.8	0.242
25:	50.131	1.8182	50.151	1.8175	5	173	10.3	2360	12.9	0.246
26:	50.849	1.7942	50.818	1.7953	5	32	1.9	745	4.1	0.419
27:	54.930	1.6702	54.919	1.6705	6	62	3.7	1277	7.0	0.371
28:	55.351	1.6585	55.333	1.6590	6	32	1.9	802	4.4	0.451
29:	59.953	1.5417	59.972	1.5413	7	117	7.0	1622	8.9	0.250
30:	62.273	1.4897	62.265	1.4899	7	26	1.6	515	2.8	0.357
31:	63.977	1.4541	63.998	1.4536	8	24	1.4	245	1.3	0.184
32:	65.096	1.4318	65.104	1.4316	7	13	0.8	108	0.6	0.150
33:	67.736	1.3822	67.787	1.3813	7	65	3.9	2046	11.2	0.567
34:	68.137	1.3751	68.158	1.3747	6	112	6.7	2982	16.3	0.479
35:	68.296	1.3723	68.296	1.3723	7	96	5.7	990	5.4	0.186

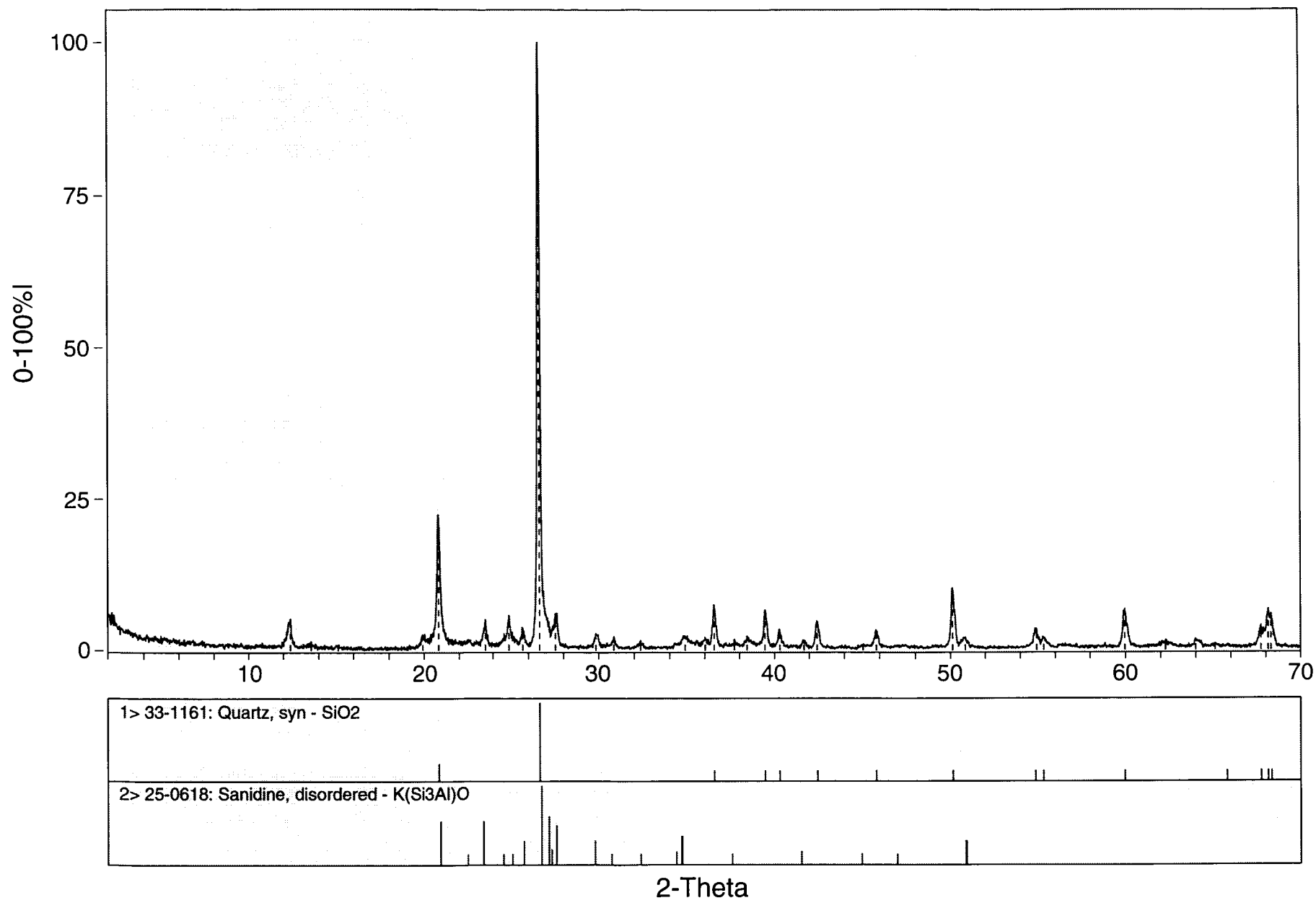
* Intensity values are based on counts per second.

ID: 1/25/94 - NOPI-263-XRD1

File: NOPI2631.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2631.MDI> 1/25/94 - NOPI-263-XRD1

38 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	()	Quartz, syn - SiO2	+	33-1161	0.3	0.00	99	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	()	Sanidine, disordered - K(Si3Al)O	+	25- 618	3.4	0.00	40		I2/m (12)	8.45	13.03	7.18	362	4	2.556
3>	()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.9	0.06	55		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
4>	()	Orthoclase, barian - (K,Ba)(Si,A		19- 3	4.4	0.00	40		I2/m (12)	8.50	13.06	7.20	365	4	
5>	()	Moganite [NR] - SiO2		38- 360	5.4	-0.06	85		I ()	8.53	10.76	4.93	226	12	2.645
6>	()	Augelite - Al2(PO4)(OH)3	+	34- 151	7.7	0.12	40		I2/m (12)	12.15	8.01	5.08	247	4	2.687
7>	()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	8.3	-0.06	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
8>	()	Hentschelite - CuFe2(PO4)2(OH)2		40- 501	8.5	0.00	40		P21/n (14)	7.27	7.79	6.98	350	2	3.789
9>	()	Rostite - (Al,Fe)(SO4)(F,OH)·5H2		42-1427	8.7	-0.06	20		P ()	11.19	13.06	10.89	1590	8	
10>	()	Jeremejevite - Al6B5O15(F,OH)3	+	35- 504	9.3	0.12	21		P63/m (176)	8.56	8.56	8.18	519	2	3.280
11>	()	Berlinite, syn - AlPO4	+	10- 423	9.4	0.12	44		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
12>	()	Chernykhite-IT2M#1\RG - (Ba,Na)	+	25- 76	9.5	0.00	40		A2/a (15)	20.02	9.18	5.29	484	4	3.140
13>	()	Montdorite-IT1M\RG [NR] - K2(Fe	+	33-1016	10.0	0.06	55		A2/m (12)	10.18	9.20	5.31	245	1	3.150
14>	()	Lanarkite, syn - Pb2OSO4	+	37- 516	10.0	-0.06	72		I2/m (12)	12.43	5.70	7.08	250	4	6.999
15>	()	Calcio-ancylite-(Nd) - CaLn(CO3)		42-1424	10.2	0.06	20		Pm (6)	7.17	8.47	4.95	300	1	4.020
16>	()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	10.3	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
17>	()	Sidwillite - MoO3·2H2O	+	39- 363	12.0	-0.06	40		P21/n (14)	10.62	13.82	10.48	1538	16	3.109
18>	()	Caminit - Mg3(SO4)2(OH)2	+	39- 359	12.0	0.12	40		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
19>	()	Tridymite-IT20H\RG, syn - SiO2		14- 260	12.7	0.06	21		P ()	9.92	9.92	81.50	6946	160	2.298
20>	()	Sopcheite - Ag4Pd3Te4		35- 671	13.4	0.00	40		P ()	9.65	11.04	7.91	842	4	9.950
21>	()	Microcline, ordered - KAlSi3O8	+	19- 926	13.7	-0.06	10		P-1 (2)	7.62	7.92	7.22	361	2	2.561
22>	()	Joessmithite - Ca2Pb(Mg,Fe)5(Si,B	+	22- 531	16.4	0.00	40		P2/n (13)	9.85	17.87	5.23	889	2	3.830
23>	()	Akaganeite-ITM\RG, syn - FeO(OH		34-1266	16.8	0.00	55		I4/m (87)	10.53	10.53	3.03	168	8	3.510
24>	()	Dumontite - Pb2(UO2)3(PO4)2(OH)4		12- 158	20.3	0.06	21		P21/m (11)	8.16	16.73	7.02	901	2	5.666
25>	()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	23.0	-0.12	18		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
26>	()	Parajamesonite - Pb4FeSb6S13		41-1401	24.1	-0.12	12								5.480
27>	()	Epsomite, syn - MgSO4·7H2O	+	36- 419	24.1	-0.12	15		P212121 (19)	11.87	11.98	6.85	974	4	1.681
28>	()	Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	26.9	0.00	10								2.590
29>	()	Potassium alum, syn - KAl(SO4)2·	+	7- 17	27.9	0.12	12		Pa3 (205)	12.16	12.16	12.16	1797	4	1.754
30>	()	Forsterite, syn - Mg2SiO4	+	34- 189	36.2	0.06	6		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
31>	()	Cuprite, syn - Cu2O	+	5- 667	41.7	0.12	7		Pn3m (224)	4.27	4.27	4.27	78	2	6.106
32>	()	Tellurobismuthite, syn - Bi2Te3	+	15- 863	41.7	-0.06	6	6.3	R-3m (166)	4.39	4.39	30.48	169	3	7.858
33>	()	Nasonite - Ca4Pb6Cl2Si6O21		14- 328	42.9	-0.12	6		P63/* (176)	9.94	9.94	13.08	1119	2	5.872
>	()	Heterosite - (Fe,Mn)PO4	+	34- 134	47.4	-0.12	6		Pmnb (62)	5.82	9.82	4.79	274	4	3.400
>	()	Dyscrasite - Ag3Sb		10- 452	49.3	0.12	6		Pm2m (25)	4.83	5.24	3.00	76	1	9.762
36>	()	Berndtite-IT4H\RG - SnS2		21-1231	51.2	0.12	8		P63mc (186)	3.64	3.64	11.80	136	2	4.471
37>	()	Paolovite - Pd2Sn		26-1297	53.1	0.00	6		Pnam (62)	5.66	8.11	4.23	194	4	11.325
38>	()	Banalsite - Na2BaAl(SiO4)4	+	38- 401	54.2	0.06	6		Ibma (72)	9.98	16.76	8.50	711	4	2.704

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

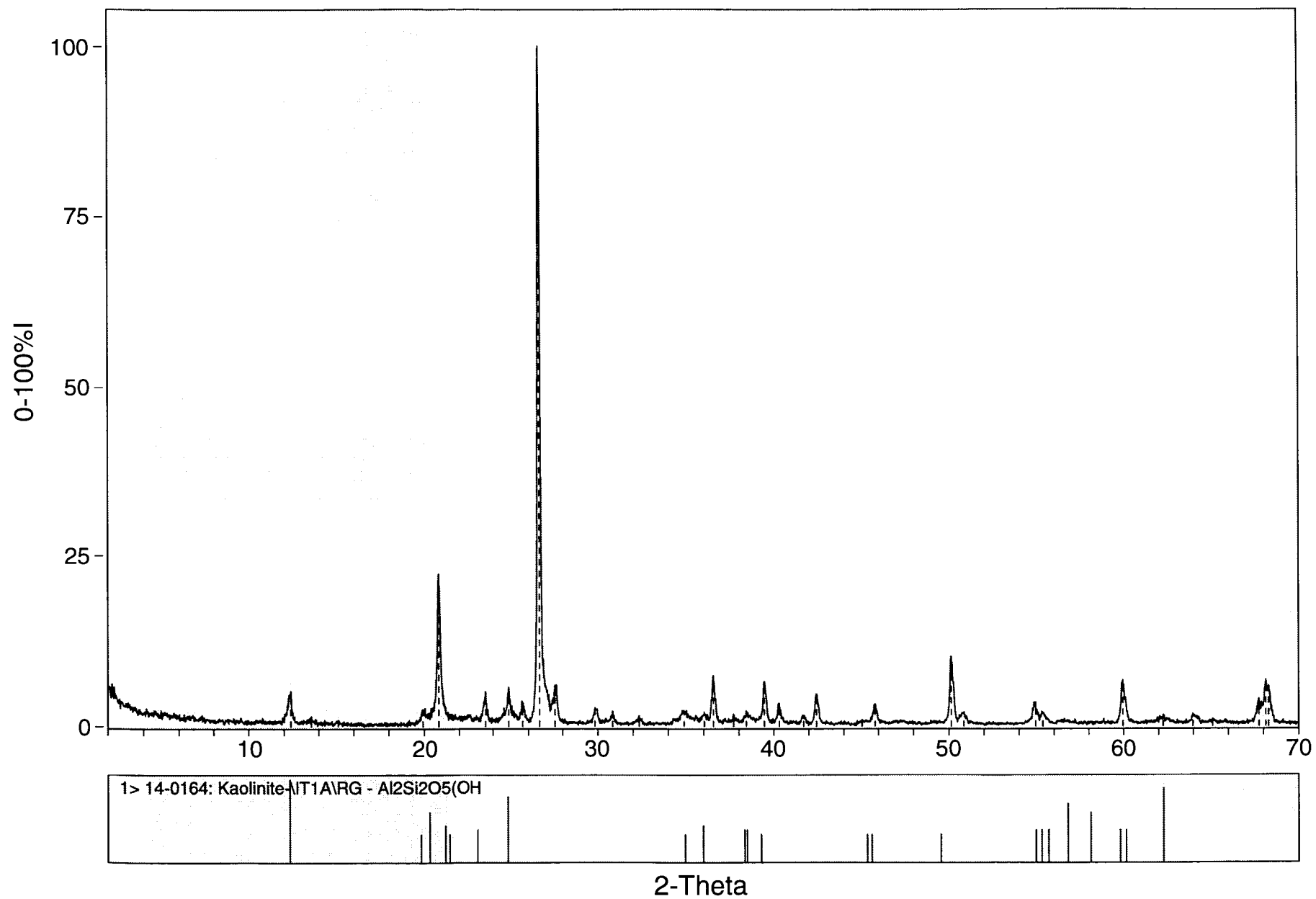
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-263-XRD1

File: NOPI2631.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2631.MDI> 1/25/94 - NOPI-263-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Microcline, ordered - KAlSi3O8	+	19- 926	2.0	-0.06	10		P-1 (2)	7.62	7.92	7.22	361	2	2.561
2>	() Rucklidgeite, syn - PbBi4Te7		27- 405	2.2	0.06	5		R-3m (166)	4.45	4.45	41.53	238	2	7.671
3>	() Dickite-IT2M#1\RG - Al2Si2O5(OH)	+	10- 446	2.2	-0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
4>	() Kaolinite-IT1A\RG - Al2Si2O5(OH)	+	14- 164	2.2	0.00	5		P-1 (2)	7.41	8.96	5.16	330	2	2.595
5>	() Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	2.4	-0.06	10		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
6>	() Unnamed mineral, syn - (Cu,Zn)		25- 322	2.5	-0.12	5		P ()	4.26	4.26	10.00	157	2	8.168
7>	() Villiyaelenite - Mn5(AsO4)2(AsO3)		41-1455	2.5	-0.12	6		C2/c (15)	18.01	9.26	9.77	810	4	3.707
8>	() Orthoclase, barian - (K,Ba,Na)(S)	+	19- 2	2.6	0.06	5		I2/m (12)	8.46	13.04	7.20	362	4	2.880
9>	() Lorandite - TlAsS2	+	19-1331	2.7	0.00	5		P21/n (14)	12.28	11.34	6.14	828	8	5.509
10>	() Tranquillityite - Fe8Zr2Ti3Si3O2		26-1143	2.8	-0.06	5		P ()	11.69	11.69	22.25	2633	6	4.696
11>	() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	2.8	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
12>	() Slawsonite - (Sr0.87Ca0.13)Al2Si	+	37- 462	2.9	-0.12	5		P21/a (14)	8.90	9.36	8.33	694	4	3.060
13>	() Bahianite - Al5.66Sb2.95Fe0.09O1	+	29- 2	2.9	0.00	4	1.8	C2/m (12)	9.41	11.54	4.41	239	2	5.363
14>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	2.9	0.00	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
15>	() Rameauite - K2Ca(UO2)6O8·9H2O	+	25- 631	3.0	0.00	4		C*/c (15)	13.97	14.26	13.88	1214	4	5.550
16>	() Chenevixite - Cu2Fe2(AsO4)2(OH)4	+	29- 553	3.0	-0.12	5		P21/m (11)	14.88	5.19	5.72	436	2	4.595
17>	() Microcline, ordered - KAlSi3O8	+	22- 687	3.1	0.12	5		P-1 (2)	7.62	7.91	7.22	360	2	2.567
18>	() Katayamalite - (K,Na)Li3Ca7(Ti,F)	+	37- 470	3.1	0.00	5		P1 (1)	9.75	19.93	9.72	1590	2	2.910
19>	() Clinoclase - Cu3(AsO4)(OH)3	+	42-1357	3.1	0.00	5		P21/a (14)	12.37	6.46	7.25	571	4	4.424
20>	() Wroewolfeite - Cu4(SO4)(OH)6·2H2	+	27-1133	3.2	0.06	4		P2/a (13)	14.36	5.65	6.06	491	2	3.303
21>	() Rostite - (Al,Fe)(SO4)(F,OH)·5H2		42-1427	3.2	0.00	20		P ()	11.19	13.06	10.89	1590	8	
22>	() Uranopilite - (UO2)6SO4(OH)10·12		8- 443	3.2	-0.06	5								3.960
23>	() Lazulite - MgAl2(PO4)2(OH)2	+	34- 136	3.2	0.00	5		P21/n (14)	7.15	7.28	7.14	324	2	3.095
24>	() Mertieite-I - Pd11(Sb,As)4		25- 598	3.3	0.06	4		P ()	15.04	15.04	22.41	4390	18	10.647
25>	() Elyite - CuPb4(SO4)(OH)8		25- 293	3.3	0.06	5		P21/a (14)	14.25	5.77	7.31	591	2	6.322
26>	() Forsterite, syn - Mg2SiO4	+	34- 189	3.3	0.00	7		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
27>	() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	3.3	-0.12	4		P31m (157)	5.31	5.31	42.62	1040	6	2.600
28>	() Carlosturanite - Mg21Si12O28(OH)		38- 404	3.3	0.06	5		Im (8)	36.01	9.41	7.29	1235	1	1.271
29>	() Meneghinite - CuPb13Sb7S24	+	29- 559	3.3	-0.06	4		Pbnm (62)	11.34	24.03	4.13	1125	1	6.466
30>	() Greenalite-IT1T\RG - Fe3Si2O5(O	+	39- 337	3.3	0.12	5		P ()	7.21	9.70	5.60	392	2	3.153
31>	() Greenalite-IT1M\RG - Fe3Si2O5(O	+	39- 348	3.3	0.12	5		P ()	7.44	9.70	5.60	391	2	3.154
32>	() Thorianite, syn - ThO2	+	42-1462	3.4	0.06	5	7.5	Fm3m (225)	5.60	5.60	5.60	44	4	10.002
33>	() Parsonsite - Pb2UO2(PO4)2·2H2O	+	12- 259	3.4	-0.06	5		P-1 (2)	6.86	10.43	6.68	464	2	6.523
34>	() Cuprorivaite, syn - CaCuSi4O10	+	12- 512	3.5	0.06	5		P4/ncc (130)	7.30	7.30	15.12	806	4	3.099
35>	() Macphersonite - Pb4SO4(CO3)2(OH)	+	38- 354	3.5	-0.06	5		Pcab (61)	10.37	23.10	9.25	2216	8	6.468
36>	() Bismite, syn - Bi2O3	+	41-1449	3.5	0.12	4	1.4	P21/n (14)	7.51	8.17	5.85	331	4	9.364
37>	() Zippeite - K4(UO2)6(SO4)3(OH)10	+	29-1062	3.5	-0.12	5		C2/m (12)	8.88	14.10	8.83	538	1	3.563
38>	() Elpidite, syn - Na2ZrSi6O15·3H2O		29-1294	3.5	-0.12	5		Pbm2 (28)	7.30	14.30	7.03	734	2	2.714
39>	() Harmotome, sodian - NaKBa(Si,Al,		25- 855	3.5	-0.12	4		P21 (4)	8.69	14.14	8.67	1000	1	
40>	() Ilmenorutile - Fe(Nb,Ta)2xTi1-x		31- 645	3.6	0.06	5		P42/mnm (136)	4.61	4.61	2.98	63	2	4.200

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

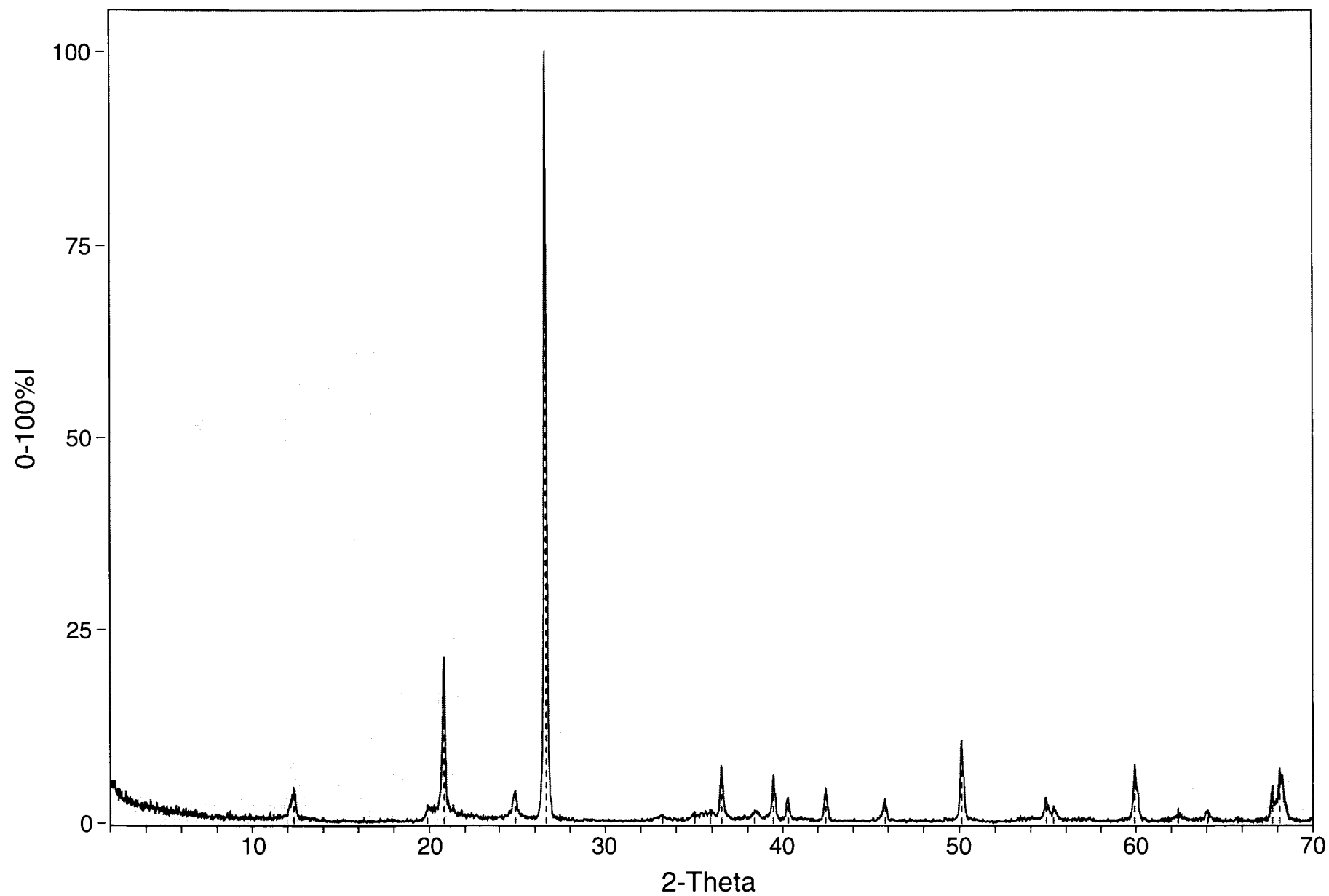
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-264-XRD1

File: NOPI2641.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2641.MDI> 1/25/94 - NOPI-264-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts) = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 2.0
Step Size  = .02                   || Intensity cutoff(%) = .5-100
Count Time = 1 sec.                || 2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.342	7.1659	12.310	7.1842	8	76	4.3	1356	7.8	0.321
2:	19.887	4.4610	19.938	4.4495	8	37	2.1	671	3.9	0.326
3:	20.844	4.2582	20.828	4.2614	8	377	21.4	5720	32.9	0.273
4:	24.904	3.5724	24.877	3.5763	12	65	3.7	938	5.4	0.260
5:	26.646	3.3428	26.628	3.3449	11	1758	100.0	17384	100.0	0.178
6:	33.228	2.6941	33.207	2.6957	6	17	1.0	257	1.5	0.272
7:	35.029	2.5596	35.044	2.5585	8	22	1.3	266	1.5	0.218
8:	35.911	2.4987	35.908	2.4989	8	26	1.5	1331	7.7	0.921
9:	36.531	2.4577	36.543	2.4570	9	133	7.6	1529	8.8	0.207
10:	38.392	2.3428	38.425	2.3408	9	25	1.4	389	2.2	0.280
11:	39.471	2.2811	39.470	2.2812	9	112	6.4	1099	6.3	0.177
12:	40.309	2.2356	40.291	2.2366	8	53	3.0	560	3.2	0.190
13:	42.452	2.1276	42.452	2.1276	6	80	4.6	807	4.6	0.182
14:	45.831	1.9783	45.803	1.9794	4	61	3.5	665	3.8	0.196
15:	50.135	1.8181	50.149	1.8176	3	197	11.2	2670	15.4	0.244
16:	54.876	1.6717	54.891	1.6713	6	56	3.2	1286	7.4	0.413
17:	55.296	1.6600	55.269	1.6607	8	37	2.1	546	3.1	0.266
18:	59.919	1.5425	59.955	1.5416	3	132	7.5	2038	11.7	0.278
19:	62.399	1.4870	62.403	1.4869	5	30	1.7	425	2.4	0.255
20:	64.057	1.4525	64.054	1.4525	5	25	1.4	378	2.2	0.272
21:	65.777	1.4186	65.778	1.4186	4	11	0.6	99	0.6	0.162
22:	67.719	1.3825	67.756	1.3819	4	83	4.7	1202	6.9	0.261
23:	68.122	1.3754	68.149	1.3749	4	122	6.9	3159	18.2	0.466

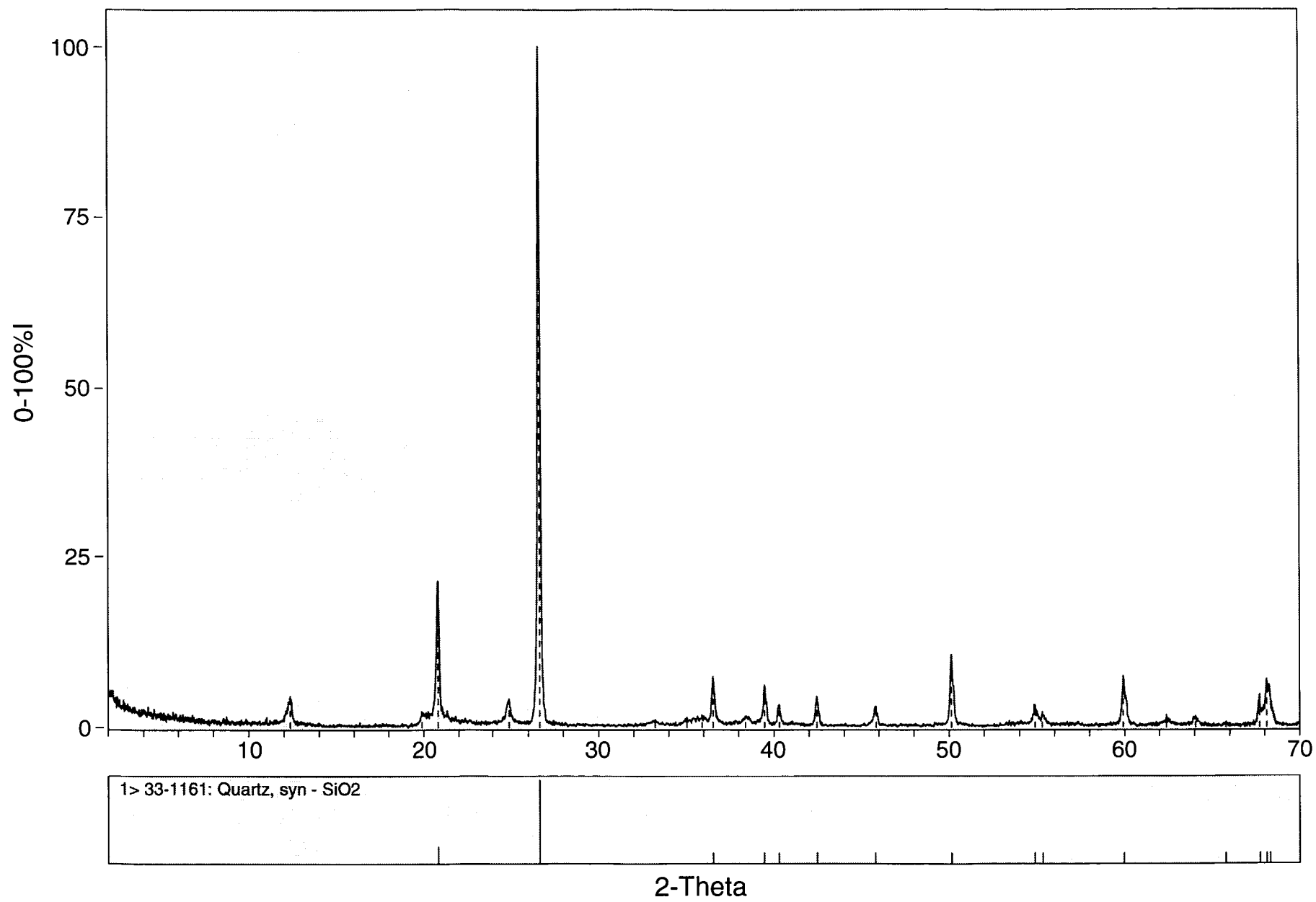
* Intensity values are based on counts per second.

ID: 1/25/94 - NOPI-264-XRD1

File: NOPI2641.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2641.MDI> 1/25/94 - NOPI-264-XRD1

18 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>	() Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	97	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.9	0.06	46		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO ₂		38- 360	5.3	-0.06	77		I ()	8.53	10.76	4.93	226	12	2.645
4>	() Berlinite, syn - AlPO ₄	+	10- 423	6.2	0.12	45		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
5>	() Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	8.7	-0.06	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
6>	() Rostite - (Al,Fe)(SO ₄)(F,OH)·5H ₂ O		42-1427	8.7	-0.06	20		P ()	11.19	13.06	10.89	1590	8	
7>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	9.3	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
8>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	9.8	-0.06	59		I2/m (12)	12.15	8.01	5.08	247	4	2.687
9>	() Montdorite-IT1M\RG [NR] - K ₂ (Fe	+	33-1016	11.7	-0.12	45		A2/m (12)	10.18	9.20	5.31	245	1	3.150
10>	() Foggite - CaAl(PO ₄)(OH)·2H ₂ O		29- 282	16.8	-0.06	20		A2122 (20)	9.27	21.32	5.19	513	8	2.772
11>	() Joesmithite - Ca ₂ Pb(Mg,Fe) ₅ (Si,B	+	22- 531	17.2	0.00	32		P2/n (13)	9.85	17.87	5.23	889	2	3.830
12>	() Akaganeite-ITM\RG, syn - FeO(OH		34-1266	17.6	0.00	46		I4/m (87)	10.53	10.53	3.03	168	8	3.510
13>	() Cuprite, syn - Cu ₂ O	+	5- 667	24.7	0.12	7		Pn3m (224)	4.27	4.27	4.27	78	2	6.106
14>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	26.1	0.00	10								2.590
15>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	30.0	-0.12	11		P212121 (19)	11.87	11.98	6.85	974	4	1.681
16>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	31.0	-0.12	15		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
17>	() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	41.8	-0.06	6		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
18>	() Heterosite - (Fe,Mn)PO ₄	+	34- 134	58.8	-0.12	6		Pmnb (62)	5.82	9.82	4.79	274	4	3.400

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

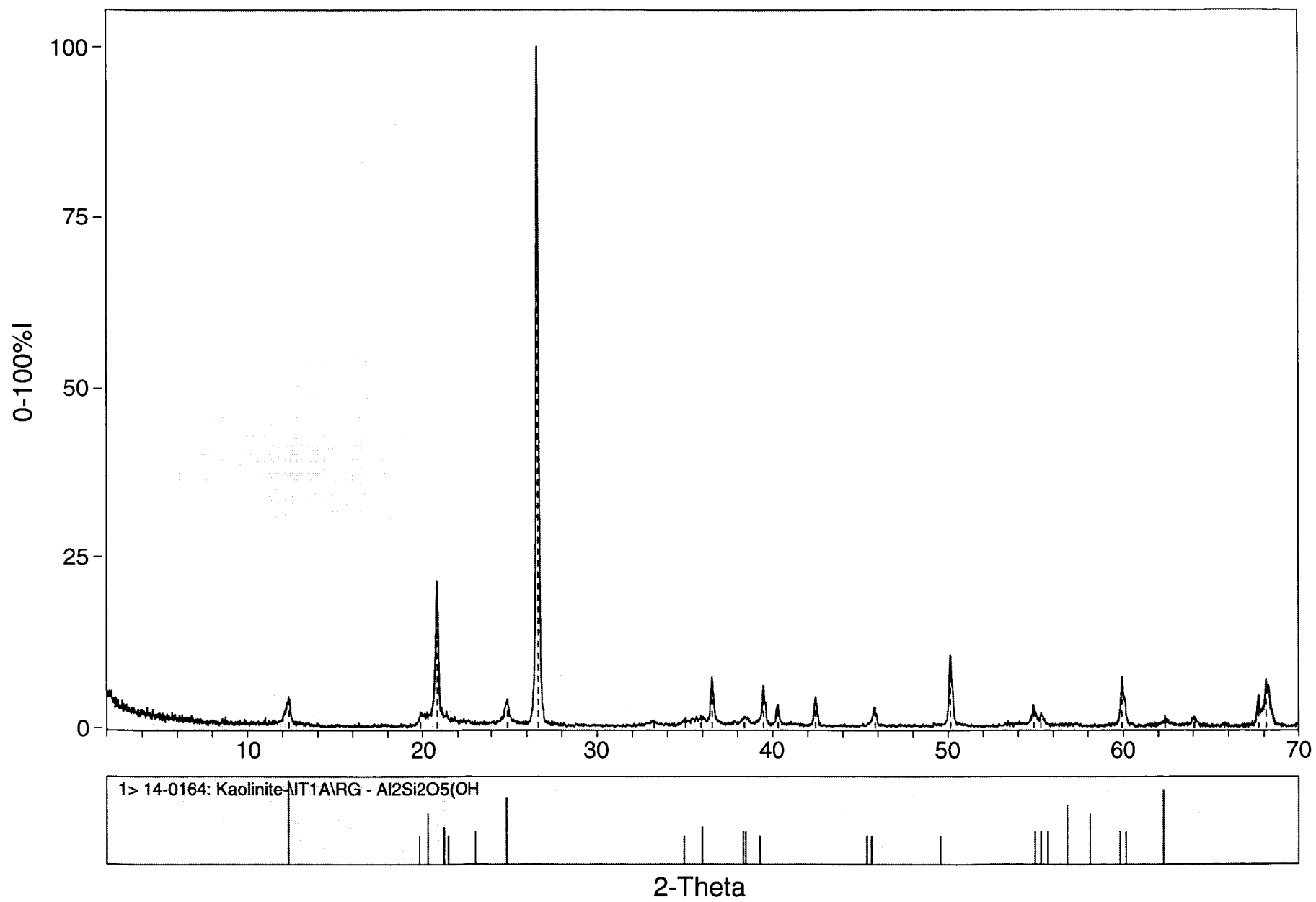
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-264-XRD1

File: NOPI2641.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2641.MDI> 1/25/94 - NOPI-264-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>	() Osbornite, syn - TiN	+	38-1420	2.5	-0.12	4		Fm3m (225)	4.24	4.24	4.24	19	4	5.388
2>	() Dickite-IT2M#1\RG - Al2Si2O5(OH)	+	10- 446	3.0	-0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
3>	() Rostite - Al(SO4)(OH)15H2O	+	41-1382	3.3	0.06	18		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
4>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	3.3	0.06	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
5>	() Ramsbeckite - Cu15(SO4)4(OH)1216	+	39- 365	3.6	-0.12	4		P21/a (14)	16.07	15.58	7.10	1777	2	3.082
6>	() Rostite - (Al,Fe)(SO4)(F,OH)15H2	+	42-1427	3.6	0.00	18		P ()	11.19	13.06	10.89	1590	8	
7>	() Tamarugite - NaAl(SO4)216H2O	+	19-1186	4.0	-0.12	15		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
8>	() Schachnerite, syn - Ag1.1Hg0.9	+	27- 618	4.0	-0.12	5		P63/mmc (194)	2.98	2.98	4.84	37	1	13.378
9>	() Kaolinite-IT1A\RG - Al2Si2O5(OH)	+	14- 164	4.0	0.06	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
10>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	34- 170	4.2	0.00	4	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
11>	() Mundrabillaite, syn - (NH4)2Ca(H	+	35- 728	4.2	0.06	10		P*/* (10)	8.64	8.18	6.41	449	2	2.116
12>	() Khademite - Al(SO4)(OH)15H2O	+	26-1011	4.2	0.00	15		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
13>	() Macaulayite - Fe24Si4O43(OH)2	+	42- 596	4.4	0.06	4		A ()	36.34	8.73	5.04	798	2	4.523
14>	() Manganyrasmalite - Mg21Si12O28(OH)	+	38- 404	4.5	0.06	4		Im (8)	36.01	9.41	7.29	1235	1	1.271
15>	() Chenevixite - Cu2Fe2(AsO4)2(OH)4	+	29- 553	4.5	-0.12	4		P21/m (11)	14.88	5.19	5.72	436	2	4.595
16>	() Spangolite - Cu6Al(SO4)Cl(OH)121	+	5- 142	4.7	-0.12	4		P3c1 (158)	8.24	8.24	14.34	844	2	3.139
17>	() Nimite-IT1M#I#a\RG - (Ni,Mg,Fe)	+	38- 424	4.7	-0.12	4		A2/m (12)	28.49	9.27	5.35	704	4	
18>	() Manganpyrosomalite - (Mn,Fe)8(Si6	+	12- 249	4.9	0.00	4		P-3m1 (164)	13.36	13.36	7.16	1107	2	3.130
19>	() Epsomite - MgSO417H2O	+	36- 419	5.0	-0.06	4		P212121 (19)	11.87	11.98	6.85	974	4	1.681
20>	() Clinocllore-IT1M#I#a\RG, ferroa	+	16- 362	5.4	-0.06	4		A2/m (12)	14.20	9.29	5.32	348	2	
21>	() Orthochrysotile-IT20#c#1\RG - M	+	22-1162	5.5	-0.06	4		Bm21b (36)	9.25	14.20	5.34	351	4	2.624
22>	() Euclase - BeAlSiO4(OH)	+	14- 65	5.5	-0.06	4		P21/a (14)	4.77	14.31	4.62	310	4	3.105
23>	() Cuprocopiapite - CuFe4(SO4)6(OH)	+	19- 394	5.7	-0.12	4		P-1 (2)	7.34	18.19	7.28	935	1	2.234
24>	() Chapmanite - Fe2SbSi2O8(OH)	+	11- 135	5.7	0.06	4		Am (8)	7.70	8.99	5.19	177	2	4.088
25>	() Cronstedtite-IT1M\RG - Fe3(Si,F	+	17- 470	5.8	-0.12	4		Am (8)	7.32	9.51	5.49	185	2	3.340
26>	() Ramsdellite - MnO2	+	42-1316	5.8	-0.12	8	3.0	Pbnm (62)	4.70	9.53	2.86	128	4	4.501
27>	() Magnesium-zippeite - Mg2(UO2)6(S	+	29- 876	5.9	0.06	4								3.300
28>	() Pennantite-1\ITM#I#a\RG - (Mn5Al	+	29- 884	5.9	-0.06	4		A2/m (12)	14.40	9.50	5.45	370	2	3.184
29>	() Wroewolfeite - Cu4(SO4)(OH)612H2	+	27-1133	5.9	0.00	4		P2/a (13)	14.36	5.65	6.06	491	2	3.303
30>	() Kaolinite-IT1Md\RG - Al2Si2O5(O	+	29-1488	5.9	-0.12	4		A*/* (12)	7.39	8.93	5.16	165	2	2.601
31>	() Vandendriesscheite - PbU7O22112H	+	13- 117	5.9	0.12	4		P*c* (51)	40.85	43.33	14.07	>9999	36	5.861
32>	() Baumite-IT1T\RG [NR] - (Mg,Mn,F	+	29- 704	6.0	0.12	4		P31m (157)	5.36	5.36	7.19	179	1	2.900
33>	() Fourmarierite - PbU4O1314H2O	+	13- 116	6.1	0.12	4		B**b (63)	14.39	16.47	14.00	1659	8	5.763
>	() Arsenopalladinite - Pd8(As,Sb)3	+	29- 959	6.1	0.06	4		P*, -1 (2)	7.43	13.95	7.35	662	4	11.014
>	() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	6.2	-0.06	4		P31m (157)	5.31	5.31	42.62	1040	6	2.600
36>	() Clinocllore-IT1M#I#b\RG, ferroa	+	16- 351	6.2	-0.06	4		A2/m (12)	14.35	9.29	5.32	352	2	2.920
37>	() Wakefieldite-(Y), syn - YVO4	+	17- 341	6.3	-0.12	4	3.6	I41/amd (141)	7.12	7.12	6.29	159	4	4.247
38>	() Matteuccite, syn - NaHSO41H2O	+	22-1379	6.3	-0.12	4	1.6	Aa (9)	8.01	7.81	7.80	217	4	2.116
39>	() Nenadkevichite [NR] - (Na,Ca,K)(	+	37- 484	6.3	-0.12	4		Pbam (55)	7.33	14.12	7.11	736	4	
40>	() Heterosite - (Fe,Mn)PO4	+	34- 134	6.4	0.00	5		Pmnb (62)	5.82	9.82	4.79	274	4	3.400

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

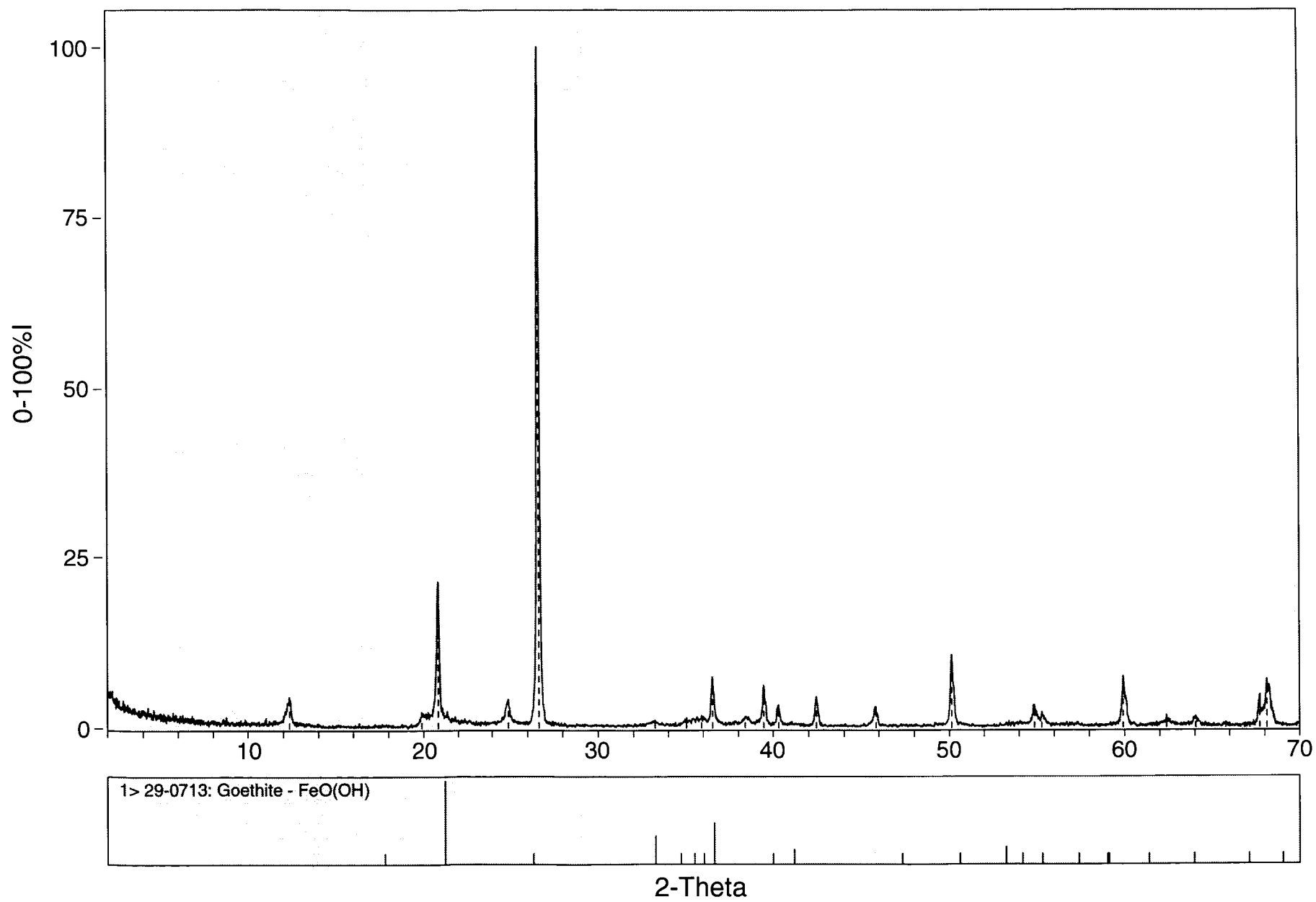
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-264-XRD1

File: NOPI2641.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2641.MDI> 1/25/94 - NOPI-264-XRD1

40 Hits Sorted on Figure-Of-Merit														QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*	
1>	()	Osbornite, syn - TiN	+	38-1420	2.1	-0.12	4			Fm3m (225)	4.24	4.24	4.24	19	4	5.388											
2>	()	Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	2.3	0.06	4			Aa (9)	14.61	5.15	8.91	329	4	2.602											
3>	()	Carlosturanite - Mg2Si12O28(OH)		38- 404	2.4	0.00	4			Im (8)	36.01	9.41	7.29	1235	1	1.271											
4>	()	Baumite-IT1T\RG [NR] - (Mg,Mn,F		29- 704	2.4	0.00	3			P31m (157)	5.36	5.36	7.19	179	1	2.900											
5>	()	Schachnerite, syn - Ag1.1Hg0.9		27- 618	2.6	-0.06	4			P63/mmc (194)	2.98	2.98	4.84	37	1	13.378											
6>	()	Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	34- 170	2.6	0.00	4	1.0		Aa (9)	14.61	5.15	8.91	329	4	2.602											
7>	()	Matteuccite, syn - NaHSO4.H2O	+	22-1379	2.8	-0.12	4	1.6		Aa (9)	8.01	7.81	7.80	217	4	2.116											
8>	()	Spangolite - Cu6Al(SO4)Cl(OH)12!		5- 142	3.0	-0.06	4			P3c1 (158)	8.24	8.24	14.34	844	2	3.139											
9>	()	Rostite - Al(SO4)(OH)15H2O	+	41-1382	3.0	0.12	8			Pcab (61)	11.19	13.06	10.89	1591	8	1.921											
10>	()	Magnesium-zippeite - Mg2(UO2)6(S		29- 876	3.0	0.06	4									3.300											
11>	()	Retgersite, syn - NiSO4.6H2O	+	8- 470	3.2	0.06	8	3.6		P41,3212 (92)	6.78	6.78	18.28	841	4	2.076											
12>	()	McConnellite, syn - CuCrO2	+	39- 247	3.3	0.12	6	2.3		R-3m (166)	2.98	2.98	17.10	44	3	5.603											
13>	()	Rostite - (Al,Fe)(SO4)(F,OH)15H2		42-1427	3.4	0.06	8			P ()	11.19	13.06	10.89	1590	8												
14>	()	Macaulayite - Fe24Si4O43(OH)2		42- 596	3.5	0.06	4			A ()	36.34	8.73	5.04	798	2	4.523											
15>	()	Ramsbeckite - Cu15(SO4)4(OH)12!6	+	39- 365	3.6	0.00	2			P21/a (14)	16.07	15.58	7.10	1777	2	3.082											
16>	()	Ramsdellite - MnO2	+	42-1316	3.7	-0.12	8	3.0		Pbnm (62)	4.70	9.53	2.86	128	4	4.501											
17>	()	Chenevixite - Cu2Fe2(AsO4)2(OH)4	+	29- 553	3.9	0.00	3			P21/m (11)	14.88	5.19	5.72	436	2	4.595											
18>	()	Stanleyite - VOSO4.6H2O	+	35- 557	4.2	-0.12	3			P-1 (2)	7.48	10.16	6.19	458	2	1.968											
19>	()	Cuprite, syn - Cu2O	+	5- 667	4.3	0.06	6			Pn3m (224)	4.27	4.27	4.27	78	2	6.106											
20>	()	Vandendriesscheite - PbU7O22.12H		13- 117	4.5	-0.06	2			P*c* (51)	40.85	43.33	14.07	>9999	36	5.861											
21>	()	Cobalt-zippeite, syn - Co2(UO2)6		29- 520	4.6	0.00	3									3.300											
22>	()	Nickel-zippeite, syn - Ni2(UO2)6		29-1434	4.6	0.00	3									3.300											
23>	()	Wakefieldite-(Y), syn - YVO4	+	17- 341	4.6	-0.12	4	3.6		I41/amd (141)	7.12	7.12	6.29	159	4	4.247											
24>	()	Brindleyite-1\ITT\RG - (Ni2Al)(A		42-1311	4.7	-0.12	4			P31m (157)	5.28	5.28	7.09	171	1	3.375											
25>	()	Umohoite-14A - UO2MoO4.4H2O		11- 375	4.7	-0.12	4			P21/* (11)	14.30	7.50	6.38	676	4	4.935											
26>	()	Cahnite - Ca2BaSO4(OH)4	+	13- 158	4.7	-0.06	4			I-4 (82)	7.11	7.11	6.20	157	2	3.157											
27>	()	Schulenbergite - (Cu,Zn)7(SO4)2(O	+	38- 349	4.8	-0.12	3			P*, -3 (147)	8.25	8.25	7.18	423	1	3.280											
28>	()	Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	4.8	-0.12	4			A*/* (12)	7.39	8.93	5.16	165	2	2.601											
29>	()	Unnamed mineral, syn - (Cu,Zn)		25- 322	4.9	-0.06	3			P ()	4.26	4.26	10.00	157	2	8.168											
30>	()	Groutite - MnO(OH)	+	24- 713	5.3	-0.12	3			Pbnm (62)	4.56	10.70	2.87	140	4	4.171											
31>	()	Dyscrasite - Ag3Sb	+	30- 97	5.3	0.12	3	10.1		Pm2m (25)	4.83	5.21	3.01	76	1	9.766											
32>	()	Euclase - BeAlSiO4(OH)	+	14- 65	5.5	-0.12	3			P21/a (14)	4.77	14.31	4.62	310	4	3.105											
33>	()	Corrensite - Mg9(Si,Al)8O20(OH)1		42- 620	5.5	0.00	3			P ()	5.34	5.34	32.06	791	1	2.031											
34>	()	Fourmarierite - PbU4O13.4H2O	+	13- 116	6.0	0.06	4			B**b (63)	14.39	16.47	14.00	1659	8	5.763											
35>	()	Paralstonite - (Ba,Sr)Ca(CO3)2	+	33- 178	6.5	-0.12	3			P321 (150)	8.69	8.69	6.15	402	3	3.600											
36>	()	Goethite - FeO(OH)	+	29- 713	6.8	-0.12	3			Pbnm (62)	4.61	9.96	3.02	139	4	4.258											
37>	()	Nimite-IT1M#I#b\RG - (Ni,Mg,A	+	22- 712	8.0	-0.06	4			A2/m (12)	14.30	9.21	5.32	348	2	3.190											
38>	()	Khademite - Al(SO4)(OH)15H2O	+	26-1011	8.2	0.12	3			Pcab (61)	11.18	13.06	10.89	1589	8	1.924											
39>	()	Nakauriite - Cu8(SO4)4(CO3)(OH)6		29- 538	8.3	0.12	3			P ()	14.59	16.22	11.47	2713	2	2.349											
40>	()	Tosudite - Na0.3Al6(Si,Al)8O20(O		22- 956	8.6	0.12	3			P ()	5.12	5.12	29.78	677	1	2.420											

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

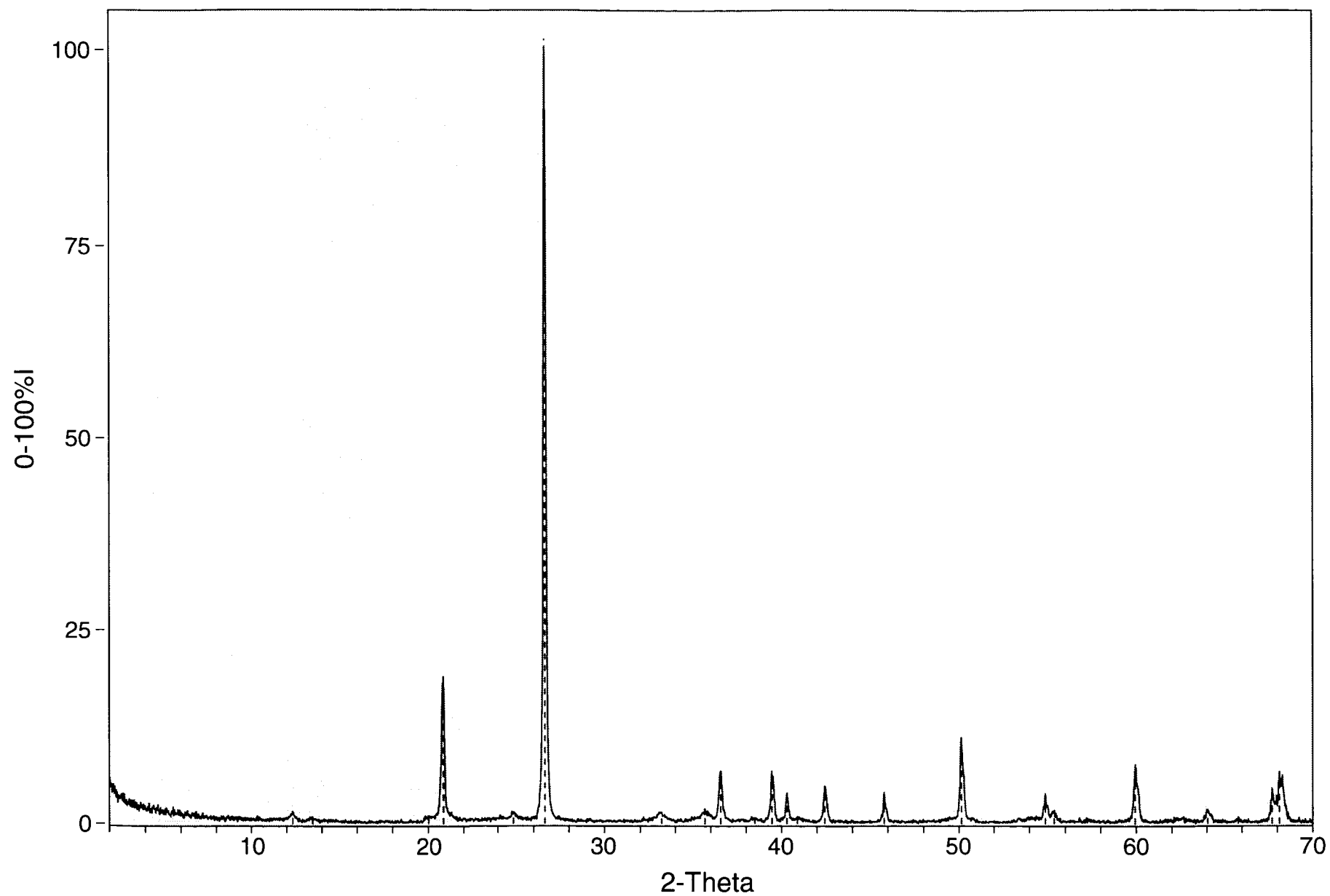
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-265-XRD1

File: NOPI2651.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2651.MDI> 1/25/94 - NOPI-265-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts) = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 2.0
Step Size  = .02                    || Intensity cutoff(%) = .5-100
Count Time = 1 sec.                 || 2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.344	7.1647	12.328	7.1740	7	24	1.2	363	1.8	0.272
2:	13.483	6.5618	13.467	6.5698	6	12	0.6	158	0.8	0.237
3:	20.027	4.4300	20.045	4.4261	6	16	0.8	314	1.6	0.353
4:	20.865	4.2539	20.844	4.2582	7	368	18.7	4478	22.3	0.219
5:	24.868	3.5775	24.873	3.5769	9	26	1.3	339	1.7	0.235
6:	26.629	3.3448	26.636	3.3439	8	1965	100.0	20108	100.0	0.184
7:	33.228	2.6941	33.209	2.6956	5	29	1.5	727	3.6	0.451
8:	35.670	2.5150	35.677	2.5146	6	37	1.9	1084	5.4	0.527
9:	36.570	2.4552	36.559	2.4559	7	134	6.8	1657	8.2	0.223
10:	38.493	2.3369	38.482	2.3375	6	13	0.7	120	0.6	0.166
11:	39.454	2.2821	39.476	2.2809	6	134	6.8	1435	7.1	0.193
12:	40.293	2.2365	40.303	2.2359	5	75	3.8	800	4.0	0.192
13:	40.874	2.2060	40.882	2.2056	5	16	0.8	318	1.6	0.358
14:	42.434	2.1285	42.457	2.1274	4	92	4.7	1095	5.4	0.214
15:	45.775	1.9806	45.798	1.9796	3	75	3.8	840	4.2	0.202
16:	50.136	1.8181	50.162	1.8172	4	222	11.3	3021	15.0	0.245
17:	54.877	1.6717	54.898	1.6711	4	72	3.7	1633	8.1	0.408
18:	55.375	1.6578	55.333	1.6590	6	30	1.5	471	2.3	0.283
19:	59.939	1.5420	59.975	1.5412	4	149	7.6	2001	10.0	0.242
20:	64.039	1.4528	64.063	1.4523	4	33	1.7	479	2.4	0.261
21:	65.779	1.4186	65.774	1.4186	3	14	0.7	141	0.7	0.181
22:	67.701	1.3829	67.759	1.3818	3	85	4.3	2937	14.6	0.622
23:	68.121	1.3754	68.150	1.3749	3	126	6.4	3548	17.6	0.507

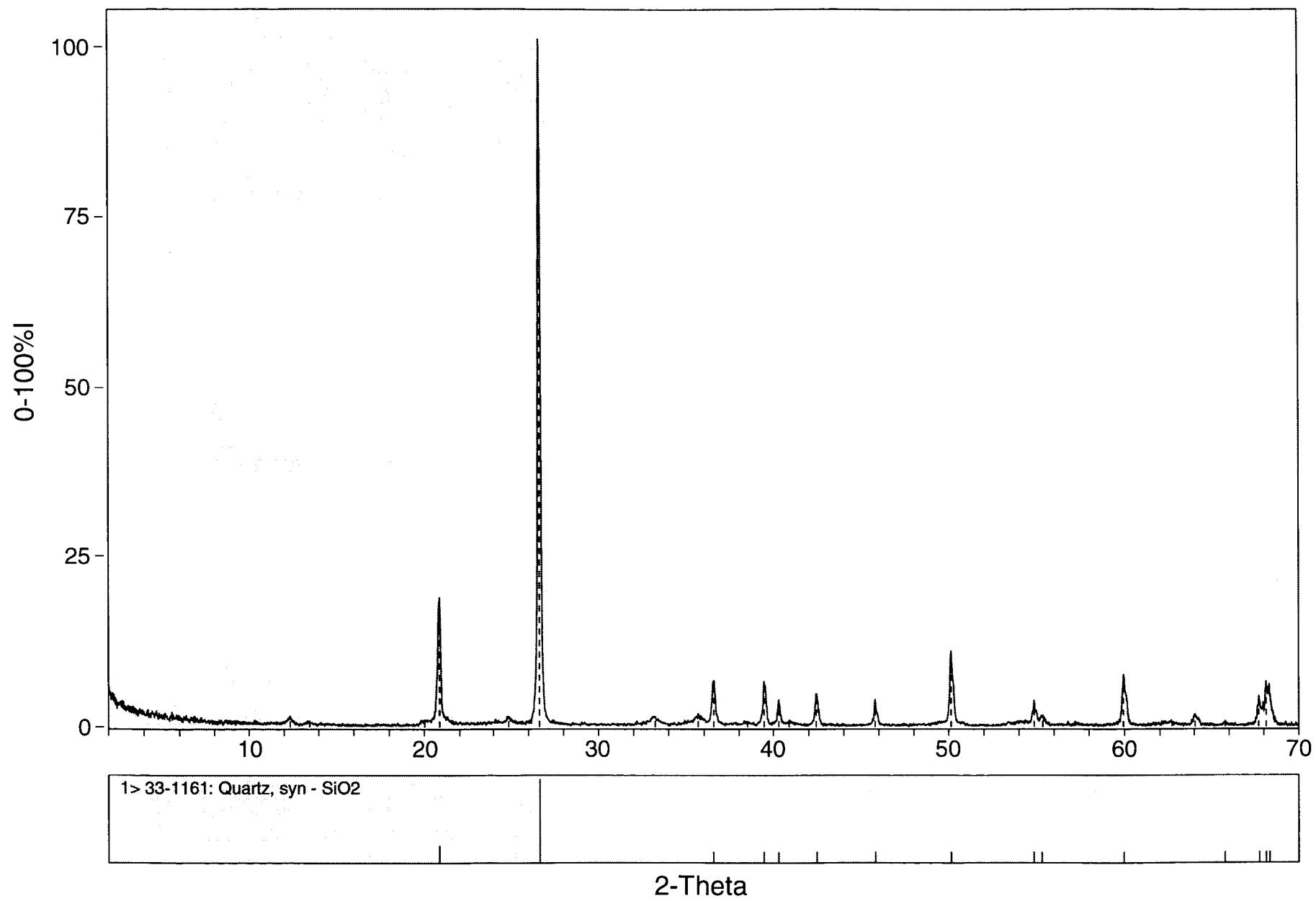
* Intensity values are based on counts per second.

ID: 1/25/94 - NOPI-265-XRD1

File: NOPI2651.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2651.MDI> 1/25/94 - NOPI-265-XRD1

15 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.3	0.00	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.5	0.06	56		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO ₂		38- 360	7.4	0.00	41		I ()	8.53	10.76	4.93	226	12	2.645
4>	() Berlinite, syn - AlPO ₄	+	10- 423	8.1	0.12	41		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
5>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	26.9	- .12	12		P212121 (19)	11.87	11.98	6.85	974	4	1.681
6>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	28.1	- .12	15		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
7>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	30.2	0.00	10								2.590
8>	() Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	31.0	0.00	15		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
9>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	31.0	0.00	17		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
10>	() Rostite - (Al,Fe)(SO ₄)(F,OH)·5H ₂ O		42-1427	35.1	- .12	10		P ()	11.19	13.06	10.89	1590	8	
11>	() Foggite - CaAl(PO ₄)(OH)·2H ₂ O		29- 282	38.5	0.00	12		A2122 (20)	9.27	21.32	5.19	513	8	2.772
12>	() Cuprite, syn - Cu ₂ O	+	5- 667	39.8	0.12	7		Pn3m (224)	4.27	4.27	4.27	78	2	6.106
13>	() Hetaerolite, syn - ZnMn ₂ O ₄	+	24-1133	47.4	0.12	6	2.7	I41/amd (141)	5.72	5.72	9.24	151	4	5.253
14>	() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	56.9	0.06	6		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
15>	() Heterosite - (Fe,Mn)PO ₄	+	34- 134	58.8	- .12	6		Pmnb (62)	5.82	9.82	4.79	274	4	3.400

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

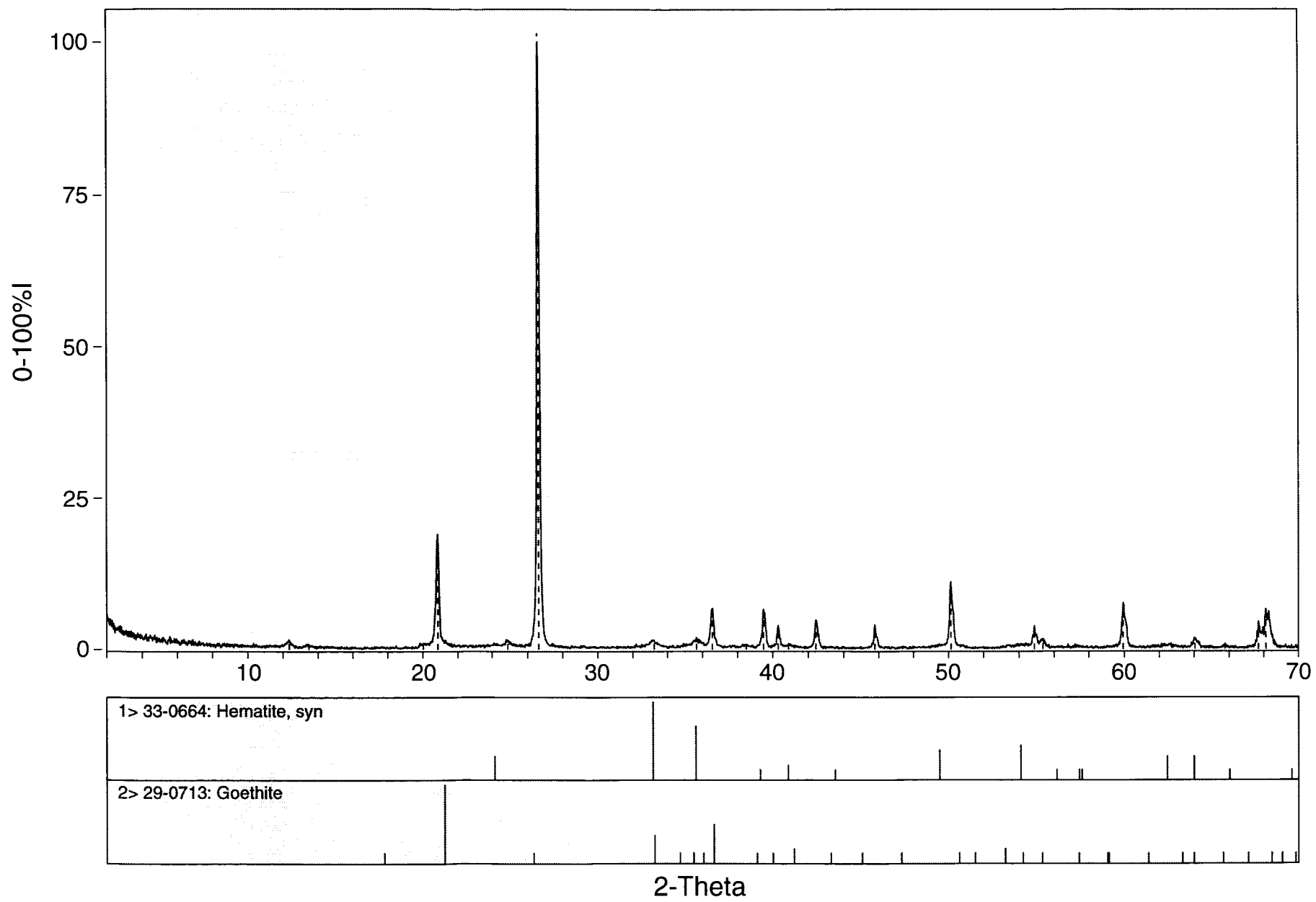
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/25/94 - NOPI-265-XRD1

File: NOPI2651.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

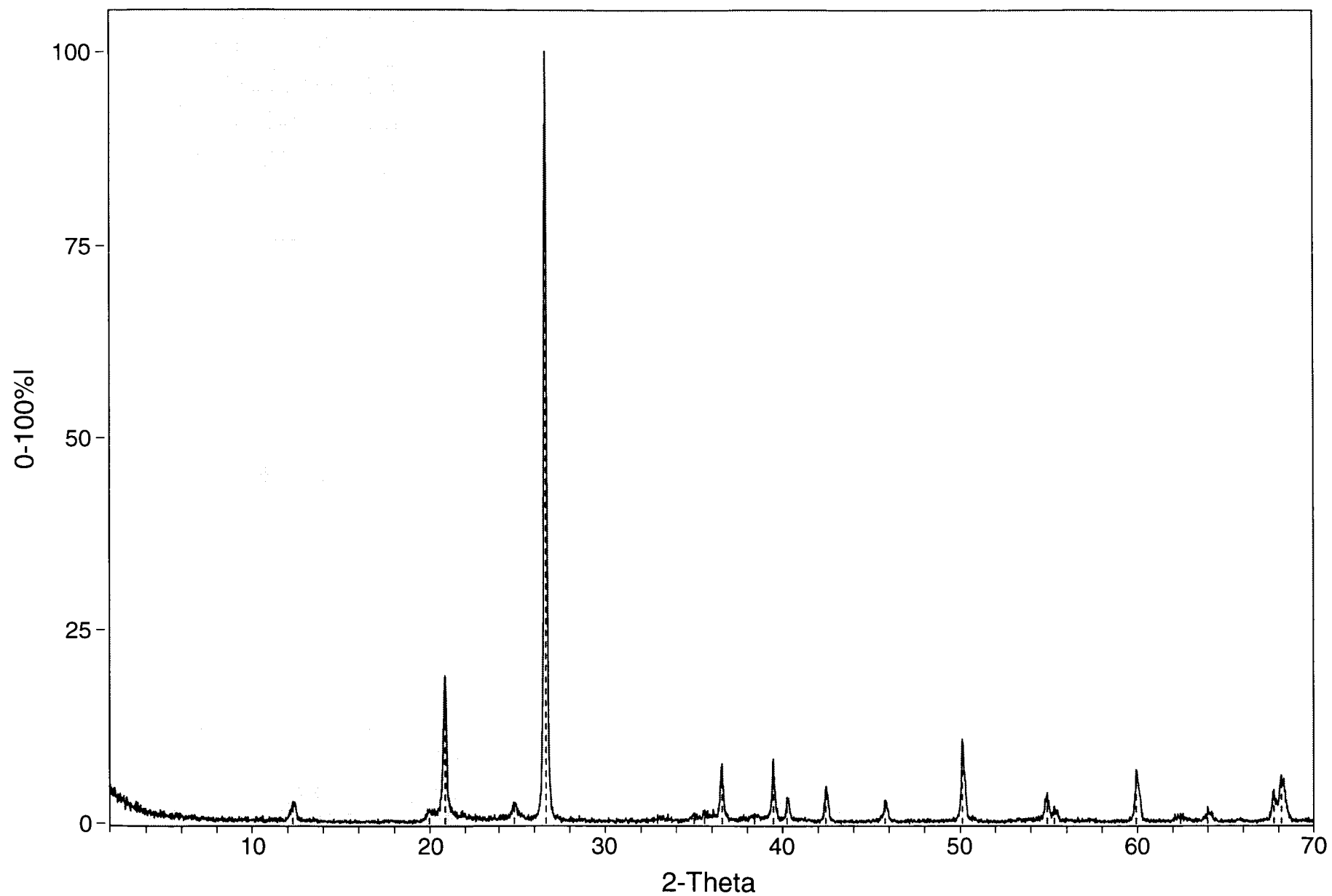


ID: 1/25/94 - NOPI-266-XRD1

File: NOPI2661.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2661.MDI> 1/25/94 - NOPI-266-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           Filter length(pts) = 25
Scan Range = 2 - 70                Noise level(sigmas) = 2.0
Step Size  = .02                   Intensity cutoff(%) = .5-100
Count Time = 1 sec.                2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.281	7.2011	12.300	7.1903	5	52	2.6	1013	4.7	0.351
2:	19.979	4.4405	20.010	4.4339	10	28	1.4	551	2.6	0.354
3:	20.859	4.2552	20.847	4.2576	9	369	18.7	5840	27.4	0.285
4:	24.861	3.5785	24.877	3.5763	11	44	2.2	882	4.1	0.361
5:	26.659	3.3411	26.642	3.3432	10	1972	100.0	21327	100.0	0.195
6:	32.943	2.7167	32.987	2.7133	5	18	0.9	340	1.6	0.340
7:	35.001	2.5616	35.011	2.5609	7	21	1.1	313	1.5	0.268
8:	35.580	2.5212	35.603	2.5196	6	29	1.5	1150	5.4	0.714
9:	36.579	2.4546	36.560	2.4559	8	146	7.4	1747	8.2	0.215
10:	38.401	2.3422	38.408	2.3418	8	19	1.0	351	1.6	0.333
11:	39.481	2.2806	39.481	2.2806	9	156	7.9	1551	7.3	0.179
12:	40.244	2.2391	40.272	2.2376	9	60	3.0	558	2.6	0.167
13:	42.442	2.1281	42.461	2.1272	5	91	4.6	1089	5.1	0.215
14:	45.764	1.9811	45.789	1.9800	5	56	2.8	798	3.7	0.256
15:	50.123	1.8185	50.159	1.8173	5	211	10.7	2665	12.5	0.227
16:	54.920	1.6704	54.918	1.6705	6	74	3.8	1583	7.4	0.385
17:	55.322	1.6593	55.298	1.6599	6	39	2.0	737	3.5	0.340
18:	59.924	1.5424	59.974	1.5412	5	136	6.9	2037	9.6	0.270
19:	62.442	1.4861	62.432	1.4863	6	21	1.1	377	1.8	0.323
20:	64.003	1.4536	64.032	1.4530	5	39	2.0	547	2.6	0.252
21:	67.742	1.3821	67.787	1.3813	5	82	4.2	3121	14.6	0.685
22:	68.163	1.3746	68.178	1.3743	5	118	6.0	3341	15.7	0.510

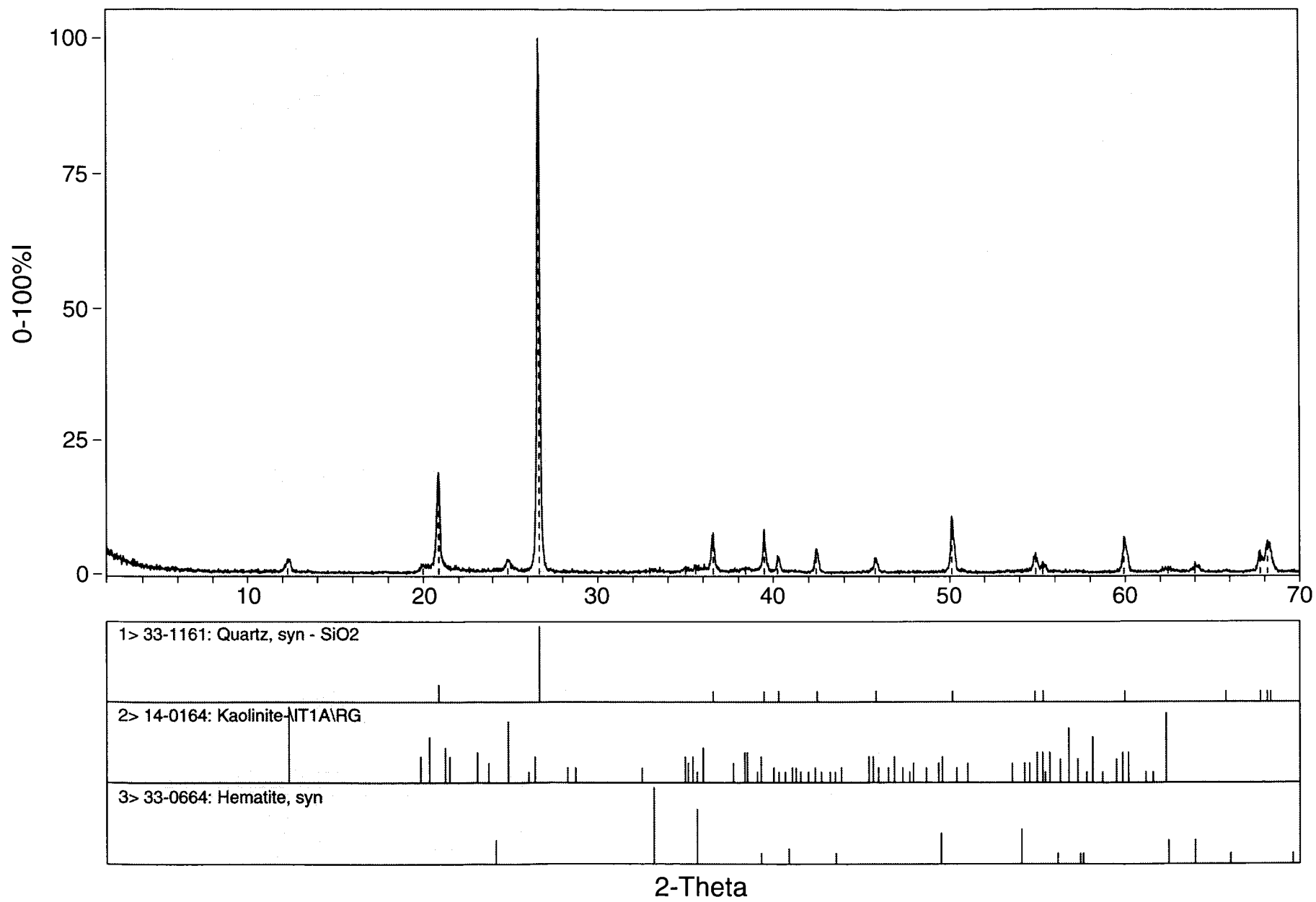
* Intensity values are based on counts per second.

ID: 1/25/94 - NOPI-266-XRD1

File: NOPI2661.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2661.MDI> 1/25/94 - NOPI-266-XRD1

16 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	96	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.2	0.06	65		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO ₂		38- 360	5.5	0.00	49		I ()	8.53	10.76	4.93	226	12	2.645
4>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	11.4	-0.06	56		I2/m (12)	12.15	8.01	5.08	247	4	2.687
5>	() Argentopyrite - AgFe ₂ S ₃	+	38- 459	12.0	-0.06	34		Pmmn (59)	6.64	11.46	6.45	491	4	4.271
6>	() Fizelyite - (Pb,Ag) ₈ Sb ₁₁ S ₂₄	+	23- 753	14.6	-0.06	34		Pnmm (59)	13.17	19.25	8.70	2205	2	5.560
7>	() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	22.3	-0.06	96		I4/m (87)	10.53	10.53	3.03	168	8	3.510
8>	() Cuprite, syn - Cu ₂ O	+	5- 667	22.8	0.12	7		Pn3m (224)	4.27	4.27	4.27	78	2	6.106
9>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	25.0	-0.12	16		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
10>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	26.1	0.00	10								2.590
11>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	29.1	-0.12	14		P212121 (19)	11.87	11.98	6.85	974	4	1.681
12>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	35.1	-0.06	11		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
13>	() Rostite - (Al,Fe)(SO ₄)(F,OH)·5H ₂ O		42-1427	35.1	-0.12	11		P ()	11.19	13.06	10.89	1590	8	
14>	() Khademit - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	35.1	-0.12	13		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
15>	() Heterosite - (Fe,Mn)PO ₄	+	34- 134	55.0	-0.12	6		Pmnb (62)	5.82	9.82	4.79	274	4	3.400
16>	() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	56.9	0.06	6		Pmnb (62)	5.98	10.20	4.76	290	4	3.222

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

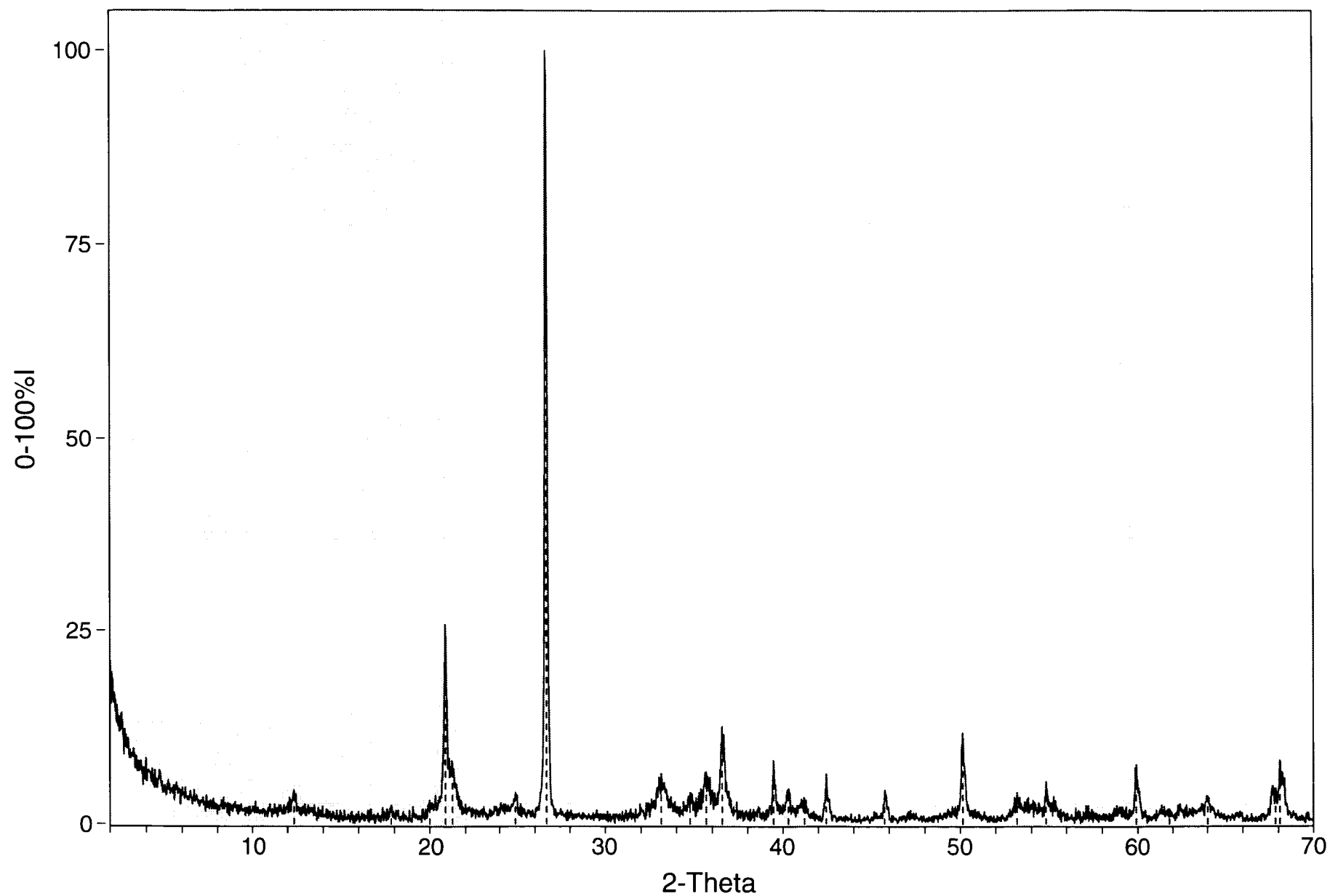
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/26/94 - NOPI-267-XRD1

File: NOPI2671.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2671.MDI> 1/26/94 - NOPI-267-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 2.0
Intensity cutoff(%) = .5-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.362	7.1541	12.351	7.1604	7	21	3.4	268	4.5	0.230
2:	17.818	4.9739	17.816	4.9746	4	11	1.8	73	1.2	0.119
3:	19.996	4.4368	20.014	4.4330	5	16	2.6	170	2.8	0.191
4:	20.855	4.2560	20.877	4.2515	5	154	25.2	2872	48.0	0.336
5:	21.234	4.1809	21.225	4.1827	4	47	7.7	1552	25.9	0.594
6:	24.891	3.5743	24.882	3.5756	6	22	3.6	233	3.9	0.191
7:	26.668	3.3400	26.659	3.3411	6	610	100.0	5987	100.0	0.177
8:	33.142	2.7008	33.148	2.7004	7	35	5.7	1004	16.8	0.516
9:	34.761	2.5787	34.765	2.5784	10	16	2.6	139	2.3	0.156
10:	35.659	2.5158	35.669	2.5151	7	34	5.6	891	14.9	0.472
11:	36.561	2.4558	36.583	2.4544	8	70	11.5	1280	21.4	0.329
12:	39.458	2.2819	39.474	2.2810	6	44	7.2	383	6.4	0.157
13:	40.314	2.2354	40.299	2.2362	4	24	3.9	1218	20.3	0.913
14:	41.214	2.1886	41.180	2.1903	6	16	2.6	193	3.2	0.217
15:	42.454	2.1275	42.466	2.1269	3	40	6.6	333	5.6	0.150
16:	45.732	1.9823	45.763	1.9811	3	24	3.9	249	4.2	0.187
17:	50.146	1.8177	50.158	1.8173	3	74	12.1	1250	20.9	0.304
18:	53.183	1.7209	53.202	1.7203	5	21	3.4	406	6.8	0.348
19:	54.842	1.6727	54.861	1.6721	5	29	4.8	263	4.4	0.163
20:	59.917	1.5425	59.939	1.5420	4	45	7.4	506	8.5	0.202
21:	61.813	1.4997	61.808	1.4998	4	11	1.8	72	1.2	0.118
22:	64.011	1.4534	64.012	1.4534	4	22	3.6	419	7.0	0.343
23:	67.847	1.3802	67.883	1.3796	3	29	4.8	1105	18.5	0.686
24:	68.090	1.3759	68.114	1.3755	3	51	8.4	1251	20.9	0.442

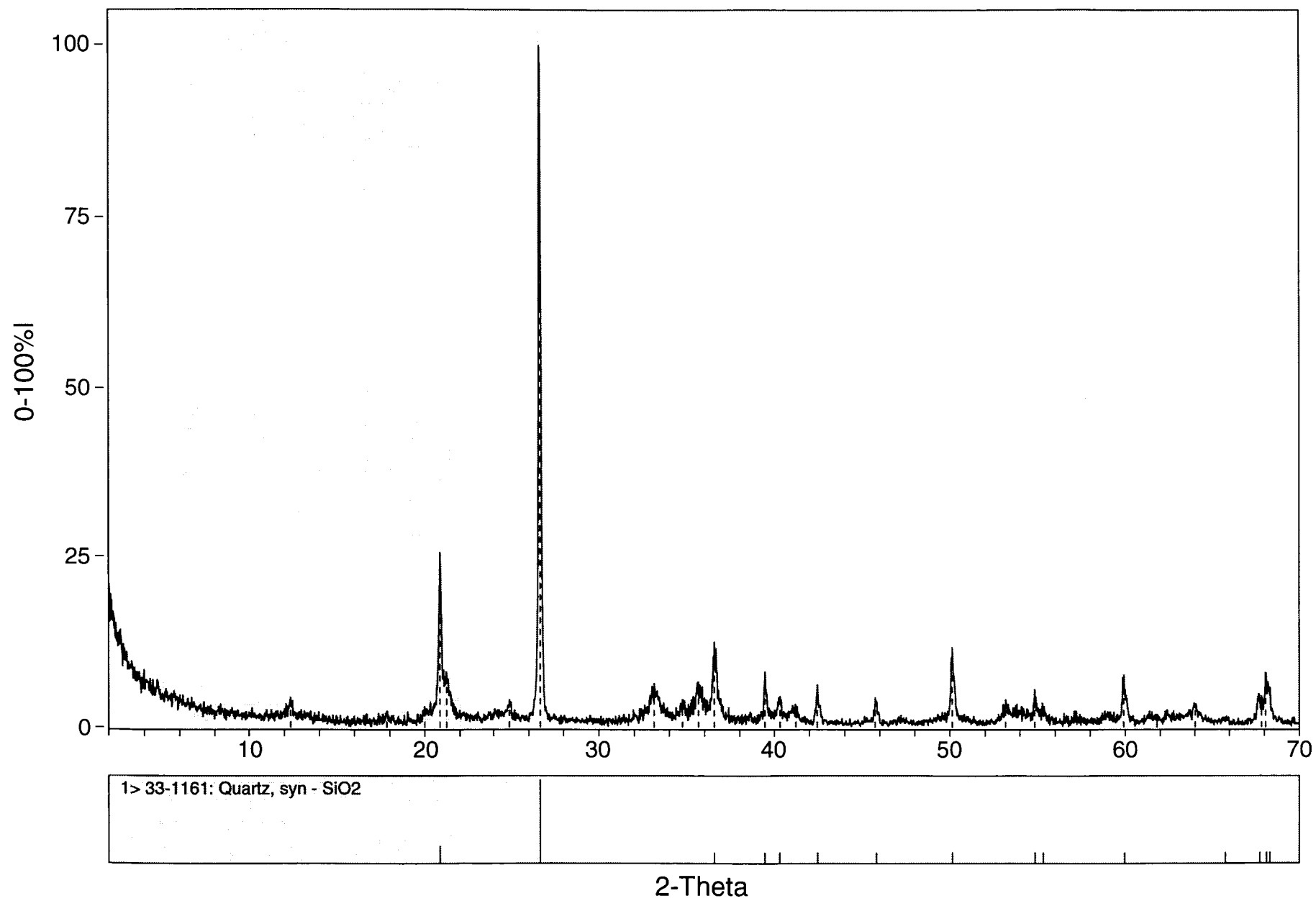
* Intensity values are based on counts per second.

ID: 1/26/94 - NOPI-267-XRD1

File: NOPI2671.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



NOPI2671.MDI> 1/26/94 - NOPI-267-XRDI

40 Hits Sorted on Figure-Of-Merit														QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	92	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649												
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	2.1	0.00	97		P21/c (14)	10.02	10.61	9.84	1046	4	2.224												
3>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	2.1	-0.12	71		P21/m (11)	8.92	6.63	5.15	305	2	3.050												
4>	() Genthelvite - Zn ₄ Be ₃ Si ₃ O ₁₂ S	+	38- 467	2.9	-0.12	39		P-43n (218)	8.12	8.12	8.12	535	2	3.706												
5>	() Moganite [NR] - SiO ₂	+	38- 360	3.0	0.00	54		I ()	8.53	10.76	4.93	226	12	2.645												
6>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	39-1373	3.3	0.06	22		P21/c (14)	10.02	10.64	9.84	1047	4	2.221												
7>	() Siderotapelite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	3.7	0.06	35		P21/* (11)	8.98	6.73	5.15	311	2	2.977												
8>	() Santite, syn - KB ₅ O ₈ ·4H ₂ O	+	25- 624	4.1	0.06	35		Aba2 (41)	11.07	11.18	9.04	559	4	1.741												
9>	() Montdorite-IT1M\RG [NR] - K ₂ (Fe	+	33-1016	4.1	0.06	71		A2/m (12)	10.18	9.20	5.31	245	1	3.150												
10>	() Microcline, ordered - KAlSi ₃ O ₈	+	19- 926	4.5	-0.12	22		P-1 (2)	7.62	7.92	7.22	361	2	2.561												
11>	() Jeremejevite - Al ₆ B ₅ O ₁₅ (F,OH) ₃	+	35- 504	4.6	0.12	22		P63/m (176)	8.56	8.56	8.18	519	2	3.280												
12>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	4.7	0.12	54		I2/m (12)	12.15	8.01	5.08	247	4	2.687												
13>	() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	4.8	0.00	49		P21/n (14)	9.10	10.05	8.02	672	4	3.710												
14>	() Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	4.9	-0.06	22		Pcab (61)	11.18	13.06	10.89	1589	8	1.924												
15>	() Siderotapelite, syn - FeTa ₂ O ₆	+	23-1124	4.9	0.06	35		P42/mnm (136)	4.75	4.75	9.20	208	2	8.215												
16>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	4.9	-0.12	22		P21/m (11)	7.35	25.23	6.10	1126	4	2.065												
17>	() Rostite - (Al,Fe)(SO ₄)(F,OH)·5H ₂	+	42-1427	4.9	0.00	23		P ()	11.19	13.06	10.89	1590	8													
18>	() Akaganeite-IT1M\RG, syn - FeO(OH	+	34-1266	5.0	0.00	71		I4/m (87)	10.53	10.53	3.03	168	8	3.510												
19>	() Foggite - CaAl(PO ₄)(OH)·2H ₂ O	+	29- 282	5.2	-0.06	23		A2122 (20)	9.27	21.32	5.19	513	8	2.772												
20>	() Ojuelaite - ZnFe ₂ (AsO ₄) ₂ (OH)·2·4H	+	35- 516	5.4	0.00	23		P21/c (14)	10.25	9.66	5.57	550	2	3.388												
21>	() Rodalquilarite - Fe ₂ H ₃ (TeO ₃) ₄ Cl	+	20- 536	5.5	-0.06	23		P*, -1 (2)	6.63	8.89	5.08	275	1	5.142												
22>	() Taeniolite-IT1M\RG, syn - K _{0.6} (	+	31-1045	5.5	-0.06	71		A2/m (12)	10.13	9.06	5.23	236	2	2.800												
23>	() Wollastonite-IT1A\RG - CaSiO ₃	+	27-1064	5.7	-0.12	39		P-1 (2)	7.33	7.93	7.07	399	6	2.903												
24>	() Masutomilite-IT1M\RG - K(Li,Mn)	+	29- 822	5.8	-0.06	39		A*/ (12)	10.11	9.09	5.25	237	2	2.940												
25>	() Muscovite-IT2M#1\RG - KAl ₂ (Si ₃ A	+	6- 263	6.0	-0.06	39		A2/a (15)	20.05	9.03	5.19	467	4													
26>	() Danalite - (Fe,Mn) ₄ Be ₃ Si ₃ O ₁₂ S	+	11- 491	6.1	0.06	92		P-43n (218)	8.21	8.21	8.21	553	2	3.310												
27>	() Corrensite - Mg ₉ (Si,Al) ₈ O ₂₀ (OH) ₁	+	42- 620	6.3	-0.12	14		P ()	5.34	5.34	32.06	791	1	2.031												
28>	() Sanidine, disordered - K(Si ₃ Al) ₃ O	+	25- 618	6.5	0.00	54		I2/m (12)	8.45	13.03	7.18	362	4	2.556												
29>	() Sidwillite - MoO ₃ ·2H ₂ O	+	39- 363	6.5	-0.06	54		P21/n (14)	10.62	13.82	10.48	1538	16	3.109												
30>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	6.6	0.06	23		Pcab (61)	11.19	13.06	10.89	1591	8	1.921												
31>	() Wallisite - CuPbTiAs ₂ S ₅	+	25- 294	6.7	0.00	97		P*, -1 (2)	7.98	8.98	7.76	457	2	5.824												
32>	() Fizelyite - (Pb,Ag) ₈ Sb ₁₁ S ₂₄	+	23- 753	6.7	-0.06	39		Pnmm (59)	13.17	19.25	8.70	2205	2	5.560												
33>	() Leucosphenite - Na ₄ BaB ₂ Ti ₂ Si ₁₀ O ₃	+	25- 784	7.0	-0.12	22		C2/m (12)	9.78	16.85	7.21	593	2	3.101												
34>	() Argentopyrite - Ag ₇ Fe ₂ S ₃	+	38- 459	7.3	-0.06	39		Pmmn (59)	6.64	11.46	6.45	491	4	4.271												
35>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	7.4	0.06	35		P21/n (14)	7.40	7.49	7.31	356	2	3.652												
36>	() Macaulayite - Fe ₂ Si ₄ O ₁₃ (OH) ₂	+	42- 596	7.6	-0.12	16		A ()	36.34	8.73	5.04	798	2	4.523												
37>	() Molybdoferrocite - Pb ₂ Cu(MoO ₄)(A	+	35- 593	7.6	-0.06	39		P21/n (14)	16.83	5.95	8.10	803	4	6.567												
38>	() Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	7.9	0.06	35		Pncn (52)	13.43	26.88	5.28	1906	4	2.257												
39>	() Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	8.0	-0.06	35		I41/amd (141)	5.25	5.25	12.99	179	2	2.775												
40>	() Tridymite-IT20H\RG, syn - SiO ₂	+	14- 260	8.0	0.12	22		P ()	9.92	9.92	81.50	6946	160	2.298												

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

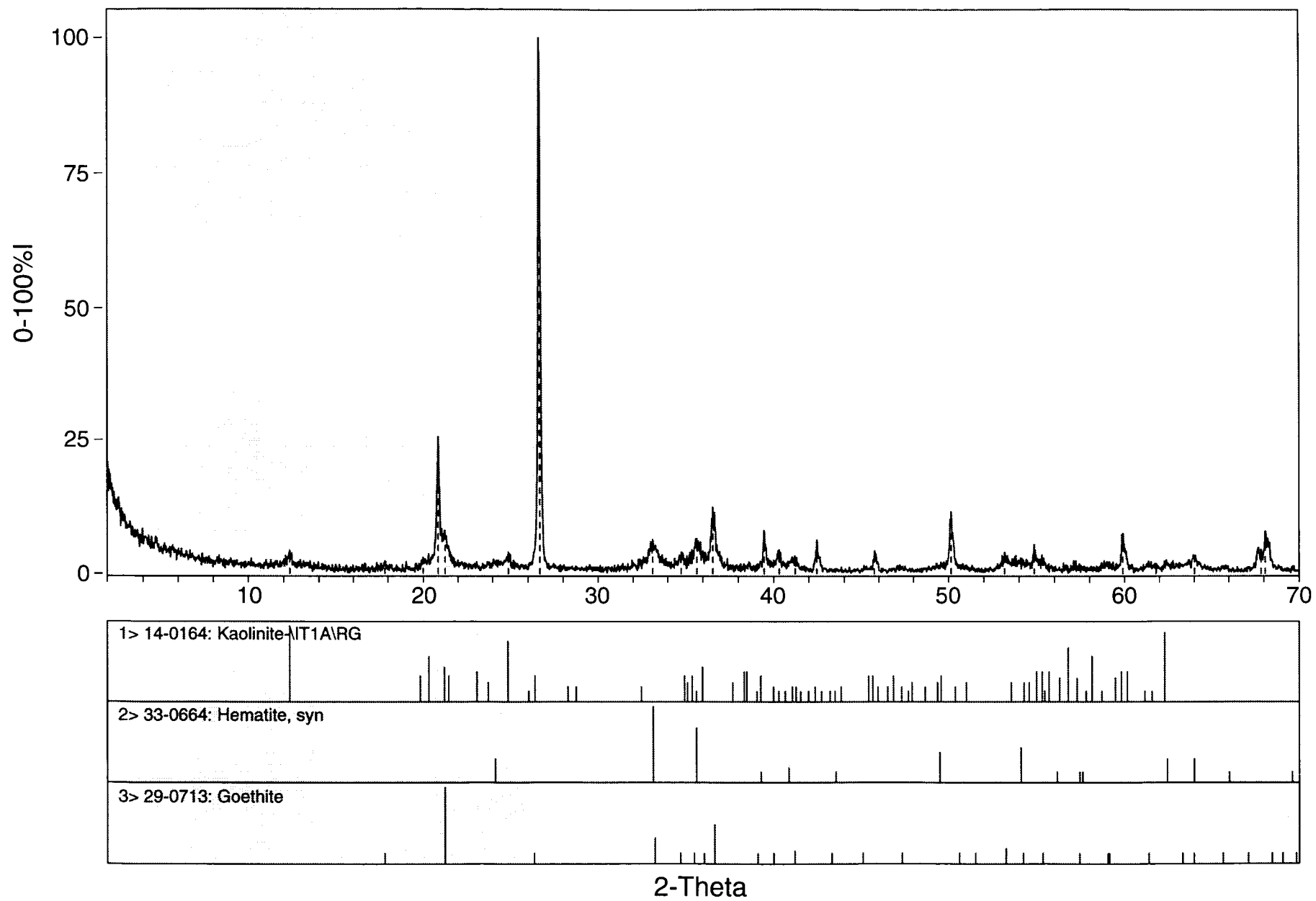
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/26/94 - NOPI-267-XRD1

File: NOPI2671.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

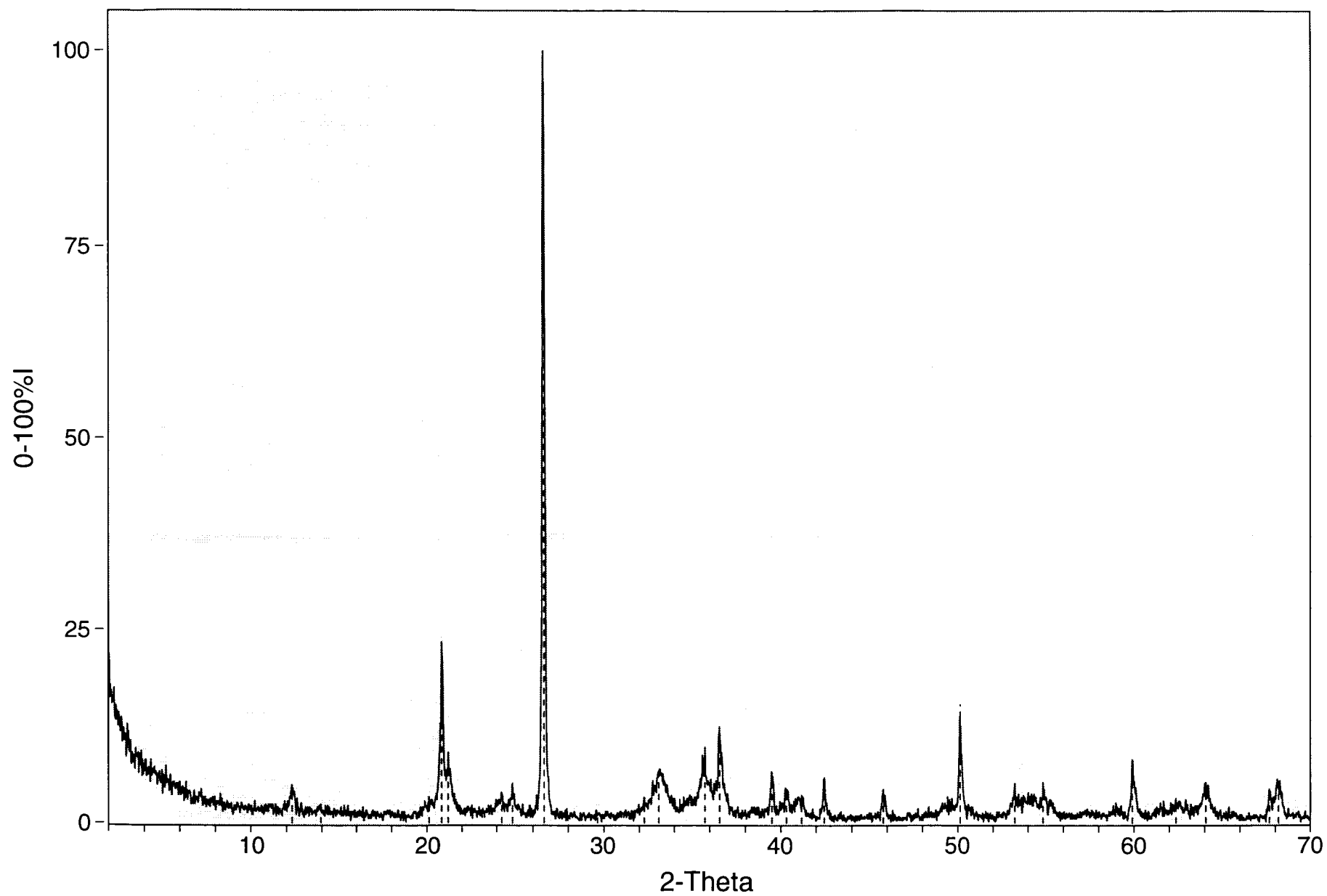


ID: 1/26/94 - NOPI-268-XRD1

File: NOPI2681.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2681.MDI> 1/26/94 - NOPI-268-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 2.0
Intensity cutoff(%) = .5-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.309	7.1848	12.315	7.1814	6	21	4.0	298	5.6	0.255
2:	13.947	6.3448	13.944	6.3461	5	11	2.1	37	0.7	0.061
3:	20.130	4.4075	20.145	4.4045	4	17	3.2	360	6.8	0.381
4:	20.830	4.2611	20.849	4.2571	4	124	23.6	2355	44.4	0.342
5:	21.209	4.1858	21.207	4.1861	5	46	8.8	970	18.3	0.380
6:	24.268	3.6647	24.254	3.6667	5	18	3.4	323	6.1	0.323
7:	24.869	3.5774	24.865	3.5780	5	25	4.8	384	7.2	0.276
8:	26.648	3.3425	26.639	3.3435	4	525	100.0	5308	100.0	0.182
9:	29.650	3.0105	29.644	3.0111	2	7	1.3	54	1.0	0.139
10:	32.289	2.7702	32.323	2.7674	5	15	2.9	360	6.8	0.432
11:	33.110	2.7034	33.130	2.7018	6	35	6.7	1298	24.5	0.668
12:	35.727	2.5112	35.715	2.5120	6	52	9.9	2259	42.6	0.782
13:	36.570	2.4552	36.579	2.4546	7	62	11.8	1204	22.7	0.350
14:	39.489	2.2802	39.497	2.2797	5	33	6.3	299	5.6	0.163
15:	40.310	2.2356	40.305	2.2359	3	23	4.4	501	9.4	0.392
16:	41.168	2.1909	41.129	2.1929	3	17	3.2	332	6.3	0.352
17:	42.448	2.1278	42.452	2.1276	2	30	5.7	306	5.8	0.184
18:	45.789	1.9800	45.795	1.9798	2	23	4.4	245	4.6	0.192
19:	50.130	1.8183	50.149	1.8176	3	81	15.4	1152	21.7	0.256
20:	53.248	1.7189	53.254	1.7187	5	24	4.6	352	6.6	0.264
21:	54.849	1.6725	54.848	1.6725	4	27	5.1	717	13.5	0.478
22:	59.910	1.5427	59.935	1.5421	4	43	8.2	400	7.5	0.167
23:	62.389	1.4872	62.414	1.4867	5	14	2.7	213	4.0	0.274
24:	64.068	1.4522	64.066	1.4523	5	27	5.1	468	8.8	0.312
25:	67.669	1.3834	67.701	1.3829	2	22	4.2	237	4.5	0.194
26:	68.188	1.3742	68.184	1.3743	2	30	5.7	711	13.4	0.427

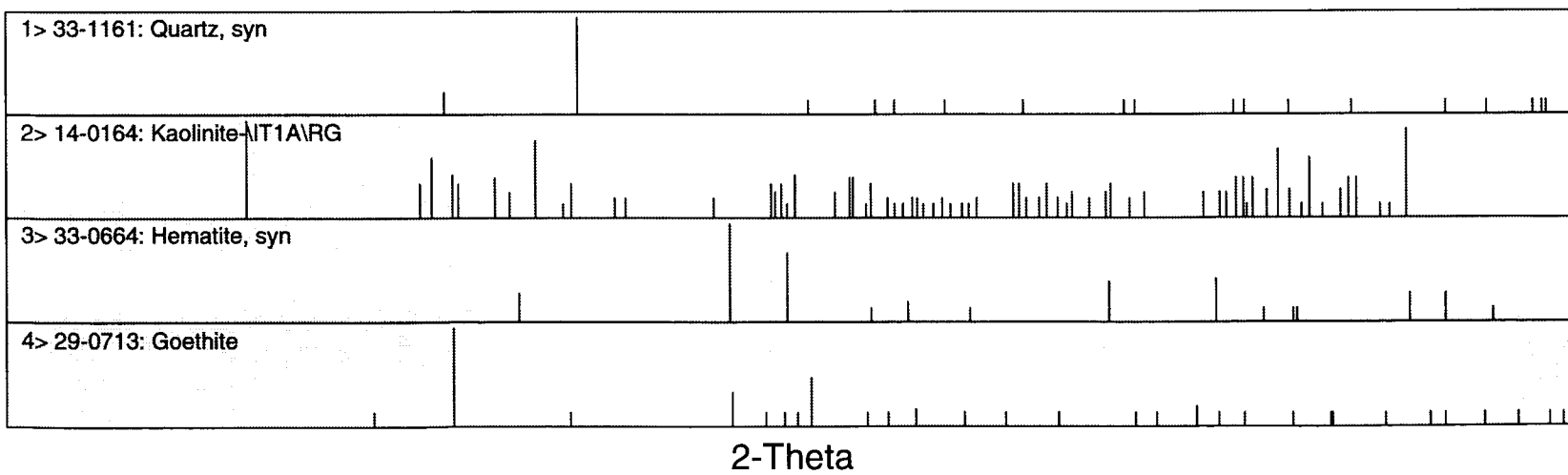
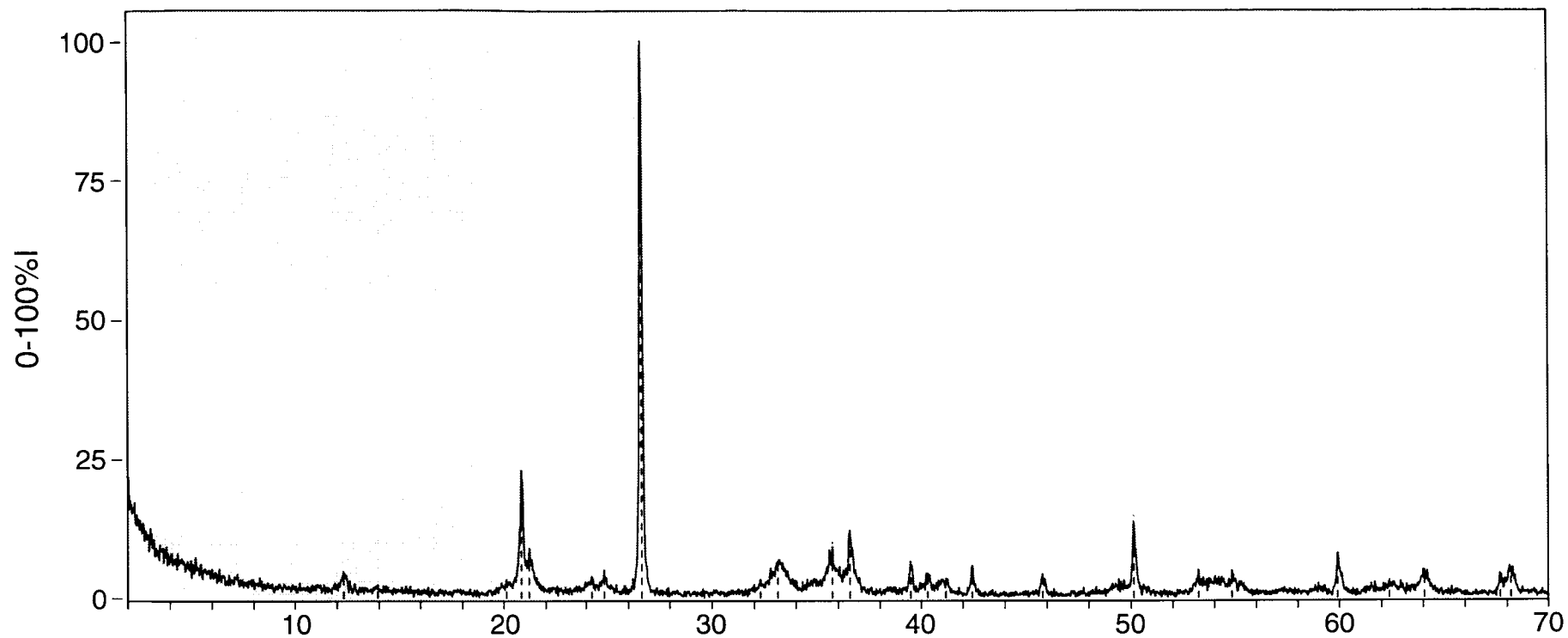
* Intensity values are based on counts per second.

ID: 1/26/94 - NOPI-268-XRD1

File: NOPI2681.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



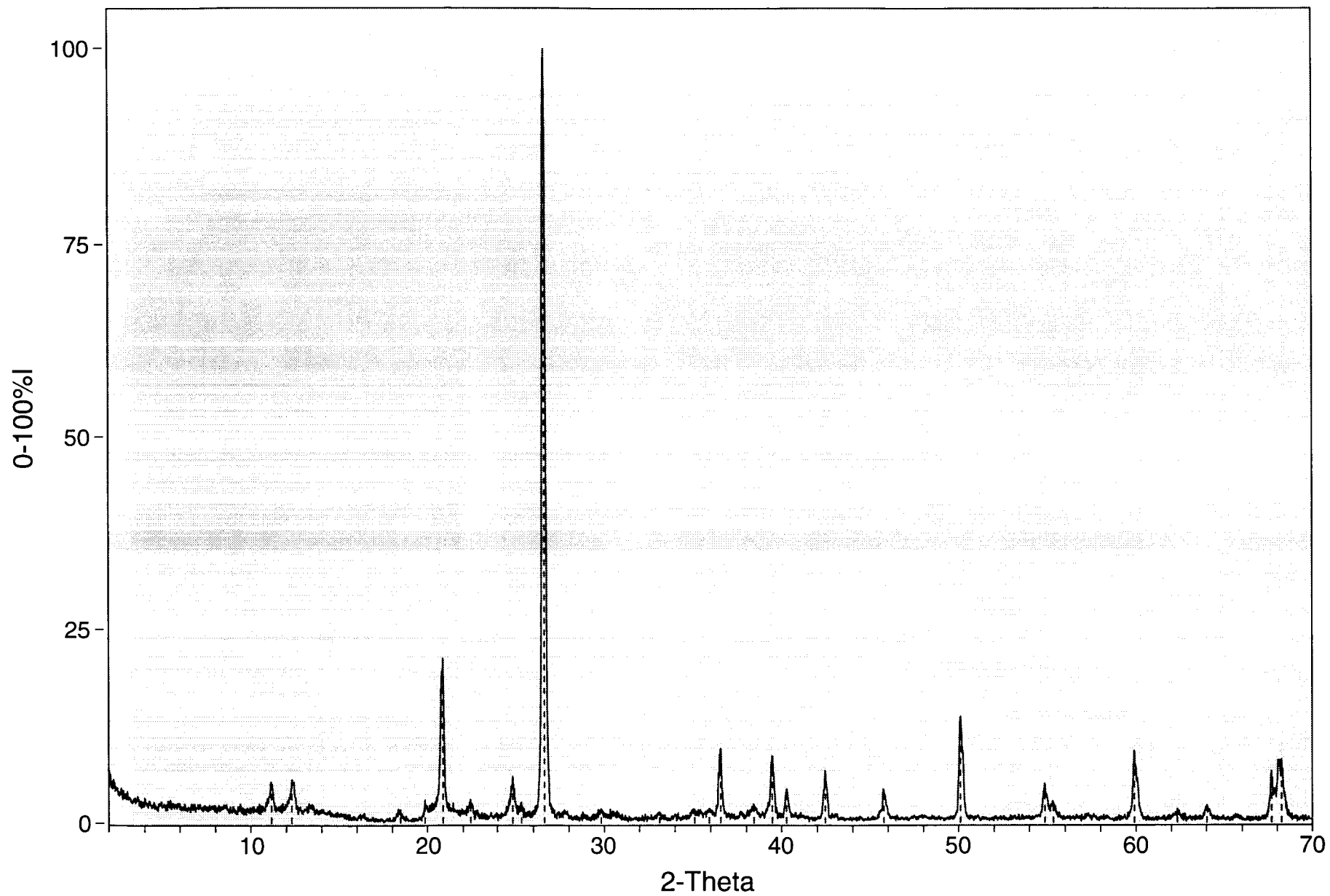
NW-SE Trowel

ID: 1/31/94 - NOPI-269-XRD1

File: NOPI2691.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

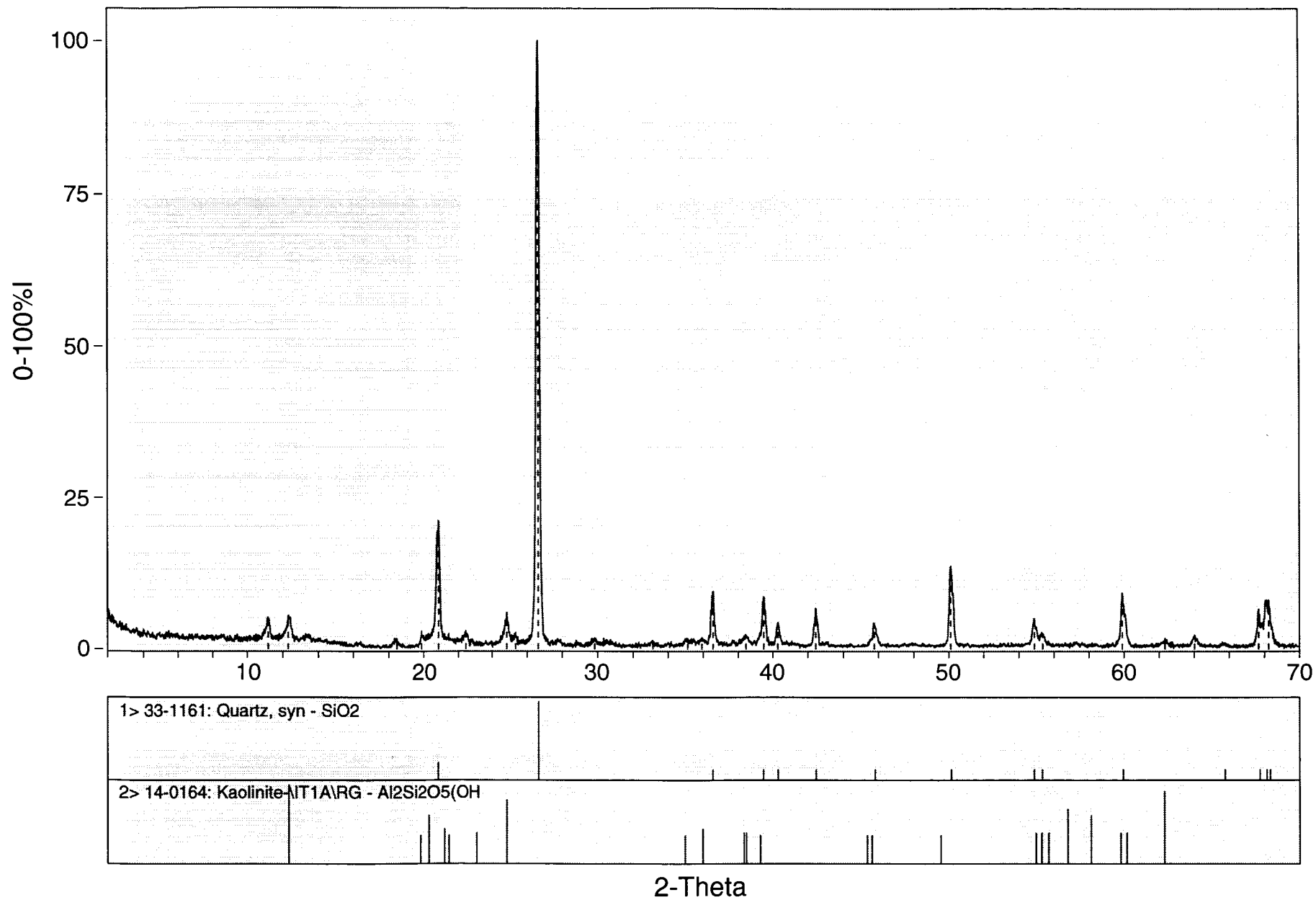


ID: 1/31/94 - NOPI-269-XRD1

File: NOPI2691.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

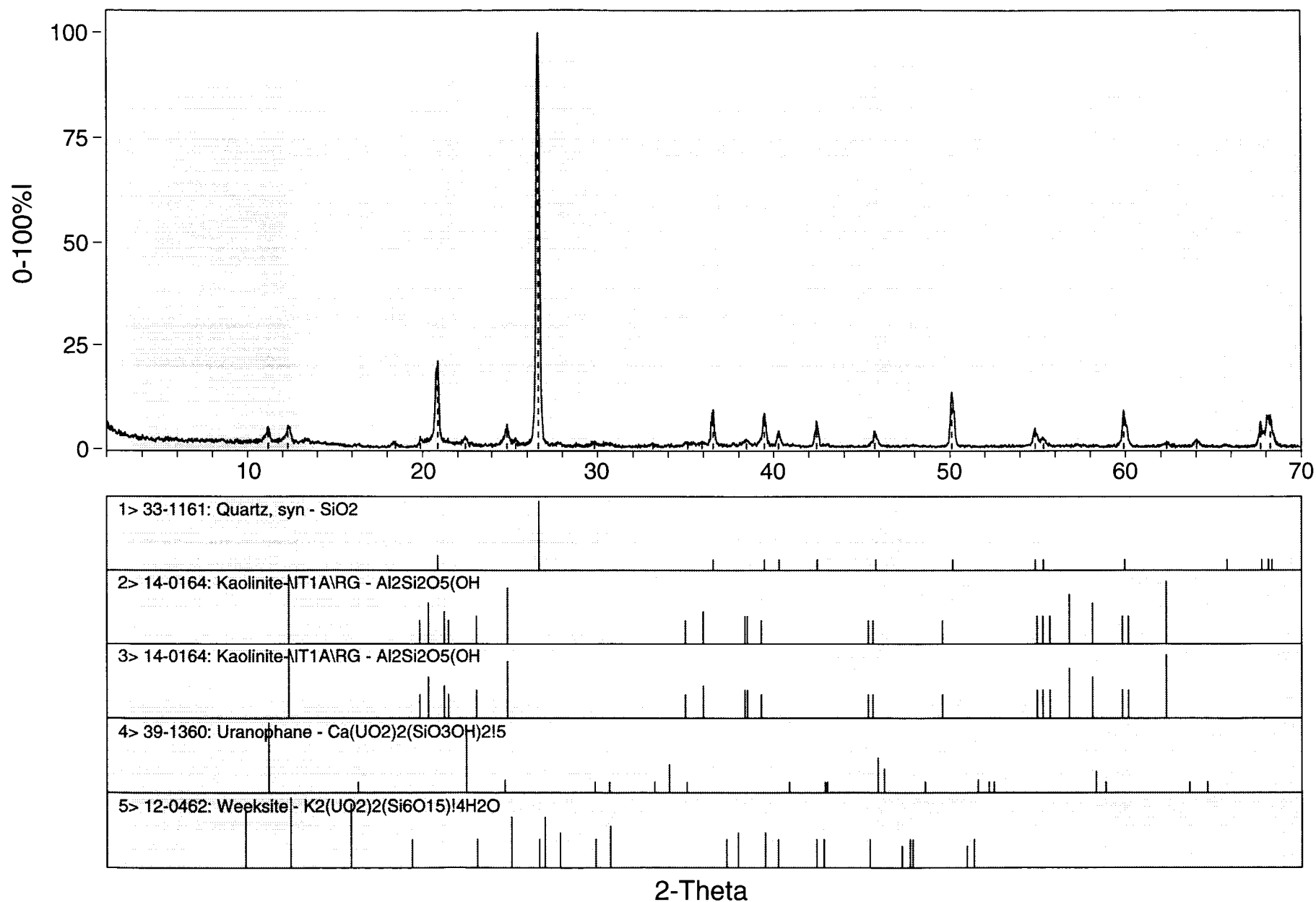


ID: 1/31/94 - NOPI-269-XRD1

File: NOPI2691.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2691.MDI> 1/31/94 - NOPI-269-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = .5-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.167	7.9170	11.159	7.9230	20	55	4.0	620	3.6	0.203
2:	12.308	7.1854	12.318	7.1799	19	59	4.3	911	5.3	0.278
3:	18.461	4.8021	18.436	4.8086	4	22	1.6	222	1.3	0.182
4:	19.866	4.4657	19.888	4.4607	8	36	2.6	282	1.6	0.141
5:	20.880	4.2510	20.840	4.2590	9	286	20.9	4294	24.9	0.270
6:	22.443	3.9583	22.442	3.9585	15	28	2.0	245	1.4	0.157
7:	24.841	3.5814	24.830	3.5830	11	73	5.3	942	5.5	0.232
8:	25.340	3.5120	25.333	3.5130	10	27	2.0	216	1.3	0.144
9:	26.639	3.3436	26.621	3.3458	11	1366	100.0	17246	100.0	0.227
10:	29.818	2.9940	29.814	2.9943	6	20	1.5	303	1.8	0.273
11:	33.116	2.7029	33.111	2.7033	6	15	1.1	121	0.7	0.145
12:	35.115	2.5535	35.108	2.5540	8	19	1.4	178	1.0	0.169
13:	35.916	2.4984	35.921	2.4980	8	20	1.5	260	1.5	0.234
14:	36.573	2.4550	36.546	2.4567	9	130	9.5	1379	8.0	0.191
15:	38.435	2.3402	38.436	2.3402	9	25	1.8	345	2.0	0.248
16:	39.474	2.2810	39.465	2.2815	9	115	8.4	1345	7.8	0.211
17:	40.274	2.2375	40.282	2.2371	10	54	4.0	538	3.1	0.179
18:	42.453	2.1276	42.449	2.1278	7	86	6.3	968	5.6	0.203
19:	45.753	1.9815	45.767	1.9809	6	55	4.0	800	4.6	0.262
20:	50.111	1.8189	50.138	1.8180	6	186	13.6	2370	13.7	0.229
21:	54.868	1.6719	54.886	1.6714	7	69	5.1	881	5.1	0.230
22:	55.346	1.6586	55.312	1.6596	7	33	2.4	524	3.0	0.286
23:	59.906	1.5428	59.942	1.5420	6	127	9.3	1762	10.2	0.250
24:	62.345	1.4882	62.344	1.4882	6	22	1.6	180	1.0	0.147
25:	64.023	1.4531	64.028	1.4530	6	27	2.0	342	2.0	0.228
26:	67.682	1.3832	67.733	1.3823	5	86	6.3	1365	7.9	0.286
27:	68.240	1.3733	68.198	1.3740	5	108	7.9	2615	15.2	0.436

* Intensity values are based on counts per second.

NOPI2691.MDI> 1/31/94 - NOPI-269-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	100	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	2.7	0.00	97		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO ₂		38- 360	4.5	-0.06	88		I ()	8.53	10.76	4.93	226	12	2.645
4>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	4.9	-0.12	63		P21/m (11)	8.92	6.63	5.15	305	2	3.050
5>	() Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	5.2	0.12	99		P21/* (11)	8.98	6.73	5.15	311	2	2.977
6>	() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	6.2	0.06	63		A2/a (15)	20.16	9.00	5.19	469	4	2.790
7>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	6.8	0.12	47		I2/m (12)	12.15	8.01	5.08	247	4	2.687
8>	() Wollastonite-IT1A\RG - CaSiO ₃		27-1064	7.4	-0.12	34		P-1 (2)	7.33	7.93	7.07	399	6	2.903
9>	() Dumontite - Pb ₂ (UO ₂) ₃ (PO ₄) ₂ (OH) ₄		12- 158	7.5	0.06	20		P21/m (11)	8.16	16.73	7.02	901	2	5.666
10>	() Lanarkite, syn - Pb ₂ SO ₄	+	37- 516	7.7	0.12	34		I2/m (12)	12.43	5.70	7.08	250	4	6.999
11>	() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	8.5	0.06	63		P-62c (190)	8.56	8.56	10.76	683	2	2.546
12>	() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	8.7	0.00	63		I4/m (87)	10.53	10.53	3.03	168	8	3.510
13>	() Foggite - CaAl(PO ₄)(OH) ₂ ·H ₂ O		29- 282	8.9	-0.06	20		A2122 (20)	9.27	21.32	5.19	513	8	2.772
14>	() Khademitte - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	9.2	-0.06	20		I2/m (12)	11.18	13.06	10.89	1589	8	1.924
15>	() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	9.9	0.00	88		P21/n (14)	9.10	10.05	8.02	672	4	3.710
16>	() Lanarkite, syn - Pb ₂ (SO ₄) ₂	+	33-1486	10.3	0.12	34		I2/m (12)	12.42	5.70	7.07	249	4	7.019
17>	() Orthoclase, barian - (K,Ba)(Si,A		19- 3	10.4	0.00	47		I2/m (12)	8.50	13.06	7.20	365	4	
18>	() Sanidine, disordered - K(Si ₃ Al)O	+	25- 618	10.5	0.00	47		I2/m (12)	8.45	13.03	7.18	362	4	2.556
19>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	10.6	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
20>	() Lipscombite, manganoan - (Fe,Mn)	+	14- 310	10.9	-0.12	34		P41212 (92)	7.40	7.40	12.81	701	4	3.660
21>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	11.0	-0.12	18		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
22>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	39-1373	11.2	0.06	20		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
23>	() Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	11.3	0.12	47		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
24>	() Giniite - FeFe ₄ (PO ₄) ₄ (OH) ₂ ·2H ₂ O		33- 669	13.2	0.06	80		C*** (65)	10.36	26.58	5.16	711	4	3.405
25>	() Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH	+	14- 164	13.7	0.00	5		P-1 (2)	7.41	8.96	5.16	330	2	2.595
26>	() Illite-montmorillonite - K _{0.5} Al ₂		35- 652	13.8	0.00	47			8.90	13.00	5.20	602		
27>	() Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	14.1	0.06	80		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
28>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	14.6	0.06	80		P21/n (14)	7.40	7.49	7.31	356	2	3.652
29>	() Tridymite-IT20H\RG, syn - SiO ₂		14- 260	14.6	0.06	20		P ()	9.92	9.92	81.50	6946	160	2.298
30>	() Dorfmanite, syn - Na ₂ HPO ₄ ·2H ₂ O		10- 190	15.3	0.06	80		P ()	10.34	16.82	6.60	1148	8	2.060
31>	() Montmorillonite-17A - Ca _{0.2} Al ₂ Si		19- 150	18.2	0.06	2		P ()	5.18	5.18	17.58	409	1	1.936
32>	() Magnesium-zippeite - Mg ₂ (UO ₂) ₆ (S		29- 876	22.2	0.12	3								3.300
33>	() Desautelsite - Mg ₆ Mn ₂ (CO ₃)(OH) ₁₆	+	33- 869	22.8	-0.12	4		R** (166)	3.11	3.11	23.39	65		2.092
34>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	23.3	0.06	11								2.590
35>	() Amesite-IT2H\RG, ferroan - (Mg,		37- 429	24.9	-0.06	4		P1 (1)	5.37	14.12	5.37	353	2	
36>	() Kaolinite-IT1Md\RG - Al ₂ Si ₂ O ₅ (O		29-1488	25.2	-0.12	5		A*/* (12)	7.39	8.93	5.16	165	2	2.601
37>	() Meta-alunogen, syn - Al ₂ (SO ₄) ₃ ·1		18- 61	26.3	0.00	5								
38>	() Janggunitte - Mn ₅ -x(Mn,Fe) _{1+x} O ₈ (O		29- 889	27.7	0.12	2		P ()	9.32	14.05	7.96	1042	4	3.590
39>	() Clinocllore-IT1M#I#b\RG, ferroa		16- 351	27.7	-0.12	4		A2/m (12)	14.35	9.29	5.32	352	2	2.920
40>	() Wavellite - Al ₃ (PO ₄) ₂ (OH) ₃ ·5H ₂ O	+	25- 20	28.8	-0.06	2		Pcmm (62)	9.62	17.34	6.99	1166	4	2.347

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

NOPI2691.MDI> 1/31/94 - NOPI-269-XRD1

40 Hits Sorted on Figure-Of-Merit													QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1	()	Kaolinite-IT1A\RG	-	Al2Si2O5(OH)	+	14-164	1.6	0.00	5		P-1 (2)	7.41	8.96	5.16	330	2	2.595								
2	>	Tamarugite	-	NaAl(SO4)2·6H2O	+	19-1186	1.7	-0.06	9		P21/m (11)	7.35	25.23	6.10	1126	4	2.065								
3	>	Unnamed mineral [NR]	-	3UO3·2SO3		8-402	1.9	0.18	4																
4	>	Khademite	-	Al(SO4)(OH)·5H2O	+	26-1011	2.0	0.00	18		Pcab (61)	11.18	13.06	10.89	1589	8	1.924								
5	>	Uranophane	-	Ca(UO2)2(SiO3OH)2·5H2O	+	39-1360	2.0	0.00	5		P21 (4)	15.92	7.01	6.67	739	2	3.849								
6	>	Uranocalcarite	-	Ca(UO2)3CO3(OH)·6H2O	+	38-350	2.0	0.18	5		Pbn* (62)	15.42	16.08	6.97	1728	4	4.098								
7	>	Dickite-IT2M#1\RG	-	Al2Si2O5(OH)	+	10-446	2.2	0.00	5		Aa (9)	14.42	8.95	5.15	330	4	2.599								
8	>	Holtedahlite	-	Mg2PO4(OH)	+	33-879	2.2	-0.18	5		P3*1 (164)	11.19	11.19	4.97	539	6	2.967								
9	>	Gatumbaite	-	CaAl2(PO4)2(OH)2·H2O	+	29-283	2.2	0.06	4		P*/ (10)	10.76	5.09	6.91	379	2	2.946								
10	>	Epsomite, syn	-	MgSO4·7H2O	+	36-419	2.3	-0.06	6		P212121 (19)	11.87	11.98	6.85	974	4	1.681								
11	>	Dewindtite	-	Pb(UO2)3(PO4)2(OH)2	+	39-1350	2.4	-0.06	4		B222 (21)	15.83	17.30	13.64	1867	8	4.800								
12	>	Foggite	-	CaAl(PO4)(OH)2·H2O		29-282	2.4	0.06	6		A2122 (20)	9.27	21.32	5.19	513	8	2.772								
13	>	Carlosturanite	-	Mg2Si12O28(OH)		38-404	2.4	0.00	5		Im (8)	36.01	9.41	7.29	1235	1	1.271								
14	>	Kovdorskite	-	Mg2(PO4)(OH)·3H2O		33-861	2.4	0.12	5		P21/a (14)	10.35	12.90	4.74	619	4	2.303								
15	>	Weeksite	-	K2(UO2)2(Si6O15)·4H2O		12-462	2.4	0.00	4		Pnna (52)	14.26	35.88	14.20	7265	16	4.018								
16	>	Microcline, ordered	-	KAlSi3O8	+	19-926	2.4	-0.12	18		P-1 (2)	7.62	7.92	7.22	361	2	2.561								
17	>	Mellite	-	CaAl2O12·16H2O	+	42-1501	2.5	0.12	5	0.1	I41/acd (142)	15.55	15.55	23.21	2806	8	1.606								
18	>	Nacrite-IT2M#2\RG	-	Al2Si2O5(OH)	+	16-606	2.6	-0.06	4		Aa (9)	14.61	5.15	8.91	329	4	2.602								
19	>	Rostite	-	Al(SO4)(OH)·5H2O	+	41-1382	2.6	0.00	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921								
20	>	Tridymite-IT20H\RG, syn	-	SiO2		14-260	2.7	0.18	9		P ()	9.92	9.92	81.50	6946	160	2.298								
21	>	Tuhualite	-	(Na,K)2Fe4Si12O30·H2O		10-440	2.7	0.12	4		Cmca (64)	14.31	17.28	10.11	1250	4	2.890								
22	>	Meta-uranocircite-17A, syn	-	Ba(UO2)3(PO4)2(OH)·4H2O	+	25-1468	2.7	0.18	5		P21 (4)	9.85	16.84	9.76	1619	4	4.002								
23	>	Forsterite, syn	-	Mg2SiO4	+	34-189	2.7	0.00	9		Pmnb (62)	5.98	10.20	4.76	290	4	3.222								
24	>	Pennantite-1\ITM#1\RG	-	(Mn5Al)3(PO4)4(OH)·6H2O		29-884	2.8	-0.12	5		A2/m (12)	14.40	9.50	5.45	370	2	3.184								
25	>	Ramsdellite	-	MnO2	+	42-1316	2.8	-0.12	12	3.0	Pbnm (62)	4.70	9.53	2.86	128	4	4.501								
26	>	Zippeite	-	K4(UO2)6(SO4)3(OH)10·H2O	+	29-1062	2.8	-0.06	4		C2/m (12)	8.88	14.10	8.83	538	1	3.563								
27	>	Mundite	-	Al(UO2)3(PO4)2(OH)·5H2O		35-535	2.8	-0.12	5		P*cn (62)	17.08	30.98	13.76	7281	16	4.295								
28	>	Dumontite	-	Pb2(UO2)3(PO4)2(OH)·4H2O		12-158	2.8	0.12	18		P21/m (11)	8.16	16.73	7.02	901	2	5.666								
29	>	Tungusite	-	Ca4Fe2Si6O15(OH)·6H2O		19-231	2.8	0.12	9								2.590								
30	>	Ferrinatrite	-	Na3Fe(SO4)3·3H2O	+	41-609	2.9	-0.18	5		P-3 (147)	15.55	15.55	8.66	1815	6	2.564								
31	>	Satterlyite	-	(Fe,Mg)2(PO4)(OH)	+	35-622	2.9	0.18	6		P31* (162)	11.36	11.36	5.04	563	6	3.680								
32	>	Nacrite-IT2M#2\RG	-	Al2Si2O5(OH)	+	34-170	2.9	0.00	5	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602								
33	>	Edingtonite	-	BaAl2Si3O10·4H2O	+	25-61	3.0	-0.12	4		P21212 (18)	9.57	9.57	6.51	596	2	2.827								
34	>	Harmotome, sodian	-	NaKBa(Si,Al)3(PO4)4(OH)·6H2O		25-855	3.0	-0.12	5		P21 (4)	8.69	14.14	8.67	1000	1									
35	>	Triangulite	-	Al3(UO2)4(PO4)4(OH)·6H2O		35-577	3.0	-0.18	5		P*, -1 (2)	10.39	10.56	8.82	774	1	3.681								
36	>	Clinochlore-IT1M#1\RG, ferroa		(Mn,Mg,Fe)8(Si,As)4(PO4)10(OH)·6H2O		16-351	3.0	-0.06	5		A2/m (12)	14.35	9.29	5.32	352	2	2.920								
37	>	Schallerite	-	(Mn,Mg,Fe)8(Si,As)4(PO4)10(OH)·6H2O		12-248	3.0	0.06	5		P ()	13.43	13.43	14.31	2235	4	3.339								
38	>	Purpurite	-	(Mn,Fe)PO4		17-202	3.0	-0.12	9		Pmnb (62)	5.83	9.70	4.77	270	4	3.200								
39	>	Metakahlerite	-	Fe(UO2)2(AsO4)2·2H2O		12-576	3.0	0.00	5																
40	>	Gismondine	-	CaAl2Si2O8·4H2O	+	39-1373	3.0	0.18	9		P21/c (14)	10.02	10.64	9.84	1047	4	2.221								

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

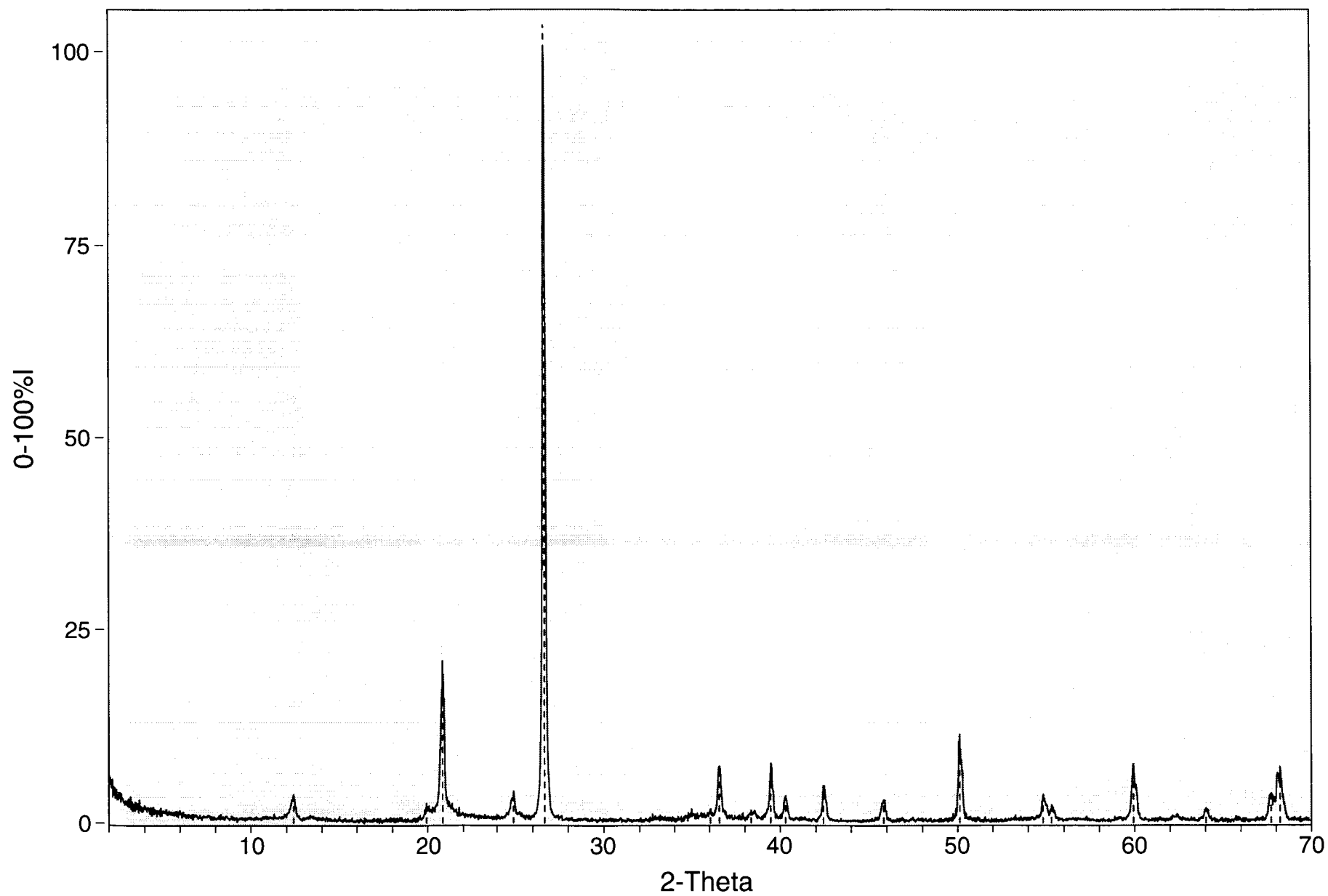
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/31/94 - NOPI-270-XRD1

File: NOPI2701.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

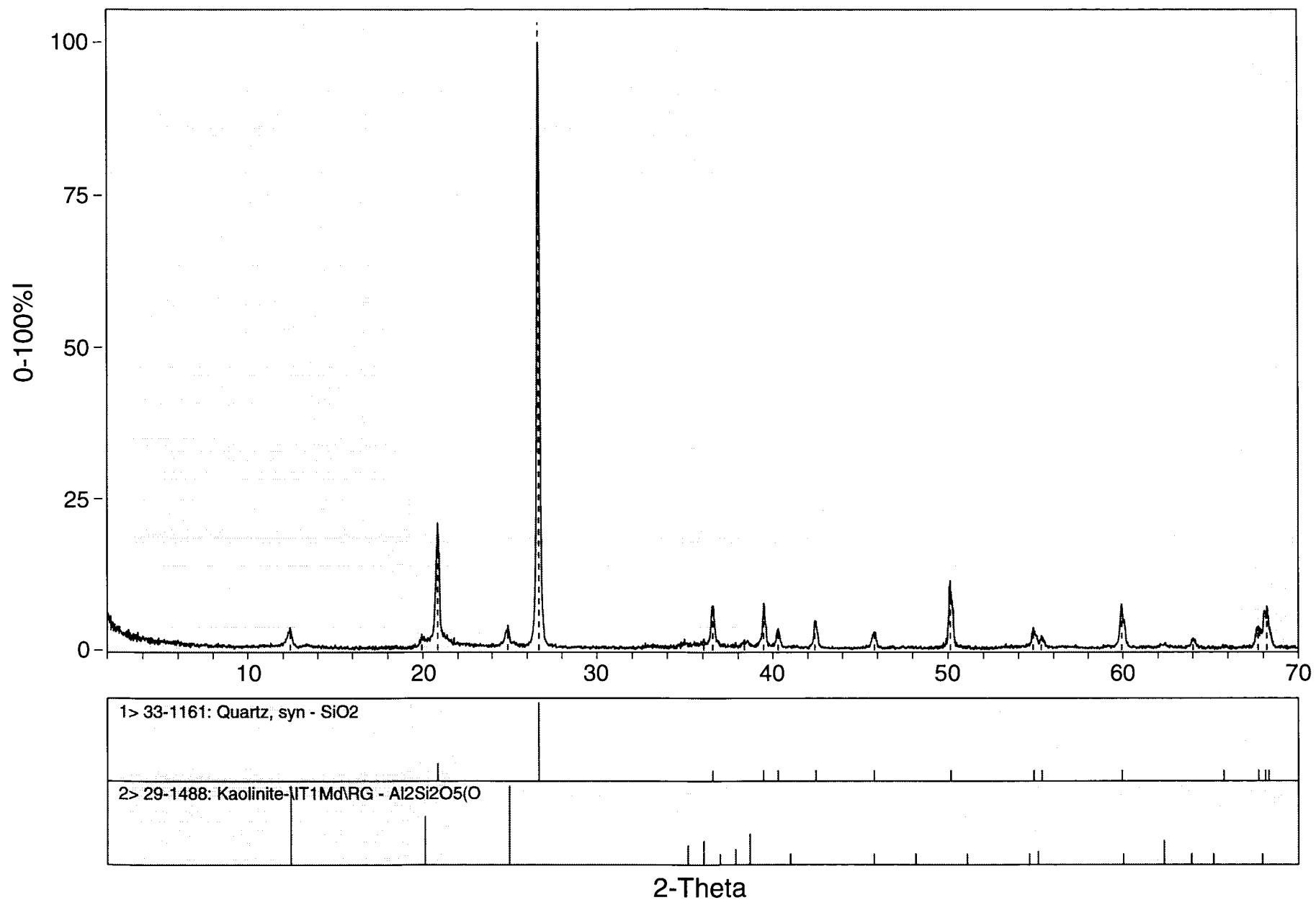


ID: 1/31/94 - NOPI-270-XRD1

File: NOPI2701.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Thu Feb 03 1994 @9:15am

File: NOPI2701.MDI> 1/31/94 - NOPI-270-XRD1

----- Scan Parameters: -----		----- Search Parameters: -----	
Radiation = CU_1.540598		Filter length(pts) = 25	
Scan Range = 2 - 70		Noise level(sigmas) = 3.0	
Step Size = .02		Intensity cutoff(%) = .5-100	
Count Time = 1 sec.		2-Theta Zero (deg) = 0	

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.406	7.1289	12.379	7.1443	8	56	3.2	772	4.1	0.248
2:	19.939	4.4495	19.965	4.4438	8	38	2.2	444	2.4	0.210
3:	20.857	4.2556	20.854	4.2563	8	351	20.2	5586	30.0	0.286
4:	24.910	3.5716	24.892	3.5742	11	62	3.6	681	3.7	0.198
5:	26.669	3.3399	26.658	3.3413	9	1739	100.0	18622	100.0	0.193
6:	36.057	2.4889	36.069	2.4881	7	25	1.4	420	2.3	0.302
7:	36.557	2.4560	36.563	2.4557	10	114	6.6	1506	8.1	0.238
8:	38.355	2.3449	38.364	2.3444	10	20	1.2	179	1.0	0.161
9:	39.475	2.2810	39.483	2.2805	8	126	7.2	1376	7.4	0.197
10:	40.292	2.2365	40.294	2.2364	9	56	3.2	581	3.1	0.187
11:	42.412	2.1295	42.447	2.1278	5	83	4.8	952	5.1	0.206
12:	45.824	1.9786	45.805	1.9794	4	48	2.8	664	3.6	0.249
13:	50.121	1.8186	50.145	1.8177	4	189	10.9	2471	13.3	0.235
14:	54.835	1.6728	54.872	1.6718	6	61	3.5	947	5.1	0.279
15:	55.295	1.6600	55.264	1.6609	6	35	2.0	579	3.1	0.298
16:	59.928	1.5423	59.951	1.5417	5	124	7.1	1851	9.9	0.269
17:	64.023	1.4532	64.030	1.4530	4	29	1.7	401	2.2	0.249
18:	67.718	1.3826	67.741	1.3821	4	61	3.5	1155	6.2	0.341
19:	68.216	1.3737	68.192	1.3741	4	120	6.9	2617	14.1	0.393

* Intensity values are based on counts per second.

NOPI2701.MDI> 1/31/94 - NOPI-270-XRD1

40 Hits Sorted on Figure-Of-Merit	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1> () Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	92	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.6
2> () Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.2	0.06	77		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3> () Moganite [NR] - SiO ₂		38- 360	3.7	0.00	63		I ()	8.53	10.76	4.93	226	12	2.645
4> () Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	6.5	-12	77		P21/m (11)	8.92	6.63	5.15	305	2	3.050
5> () Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	9.2	0.06	45		P21/a (11)	8.98	6.73	5.15	311	2	2.977
6> () Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	10.7	-06	45		I2/m (12)	12.15	8.01	5.08	247	4	2.687
7> () Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	10.8	-06	57		I2/m (12)	12.43	5.70	7.08	250	4	6.999
8> () Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	12.0	0.00	57		P21/n (14)	9.10	10.05	8.02	672	4	3.710
9> () Despujolite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆	+	20- 226	12.2	0.06	77		P-62c (190)	8.56	8.56	10.76	683	2	2.546
10> () Akaganeite-ITM\RG, syn - FeO(OH		34-1266	14.3	-12	70		I4/m (87)	10.53	10.53	3.03	168	8	3.510
11> () Wollastonite-IT1A\RG - CaSiO ₃		27-1064	14.6	-12	48		P-1 (2)	7.33	7.93	7.07	399	6	2.903
12> () Giniite - FeFe ₄ (PO ₄) ₄ (OH) ₂ ·2H ₂ O		33- 669	16.5	0.06	45		C*** (65)	10.36	26.58	5.16	711	4	3.405
13> () Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	16.7	-06	70		P21/a (15)	20.16	9.00	5.19	469	4	2.790
14> () Lanarkite, syn - Pb ₂ (SO ₄) ₂ O	+	33-1486	19.7	0.12	48		I2/m (12)	12.42	5.70	7.07	249	4	7.019
15> () Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH	+	16- 606	20.4	0.06	3		Aa (9)	14.61	5.15	8.91	329	4	2.602
16> () Sanidine, disordered - K(Si ₃ Al)O	+	25- 618	21.6	0.00	63		I2/m (12)	8.45	13.03	7.18	362	4	2.556
17> () Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	22.0	0.06	45		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
18> () Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	22.1	0.06	45		P21/n (14)	7.40	7.49	7.31	356	2	3.652
19> () Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH	+	10- 446	24.0	-06	3		Aa (9)	14.42	8.95	5.15	330	4	2.599
20> () Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	24.0	0.00	11								2.590
21> () Dorfmanite, syn - Na ₂ HPO ₄ ·2H ₂ O		10- 190	24.8	0.06	45		P ()	10.34	16.82	6.60	1148	8	2.060
22> () Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	25.2	-06	12		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
23> () Lipscombite, manganoan - (Fe,Mn)	+	14- 310	25.3	-12	48		P41212 (92)	7.40	7.40	12.81	701	4	3.660
24> () Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	25.3	-06	45		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
25> () Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	26.3	0.00	17		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
26> () Orthoclase, barian - (K,Ba)(Si,A		19- 3	27.6	0.00	63		I2/m (12)	8.50	13.06	7.20	365	4	3.300
27> () Magnesium-zippeite - Mg ₂ (UO ₂) ₆ (S		29- 876	28.8	0.06	3								2.601
28> () Kaolinite-IT1Md\RG - Al ₂ Si ₂ O ₅ (O		29-1488	30.5	-06	3		A*/ (12)	7.39	8.93	5.16	165	2	2.601
29> () Purpurite - (Mn,Fe)PO ₄		37- 478	30.7	0.12	13		Pmnb (62)	5.82	9.77	4.78	272	4	
30> () Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	33.8	0.06	70		I2/m (12)	8.59	13.05	7.20	368	4	3.390
31> () Corrensite - Mg ₉ (Si,Al) ₈ O ₂₀ (OH) ₁		42- 620	33.9	-12	3		P ()	5.34	5.34	32.06	791	1	2.031
32> () Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH	+	14- 164	33.9	0.06	3		P-1 (2)	7.41	8.96	5.16	330	2	2.595
33> () Macaulayite - Fe ₂ Si ₄ O ₁₃ (OH) ₂		42- 596	34.6	0.12	3		A ()	36.34	8.73	5.04	798	2	4.523
34> () Orthochrysotile-IT20#c#1\RG - M	+	22-1162	34.6	-06	3		Bm21b (36)	9.25	14.20	5.34	351	4	2.601
35> () Pennantite-1\ITM#I#a\RG - (Mn ₅ Al		29- 884	35.6	0.00	3		A2/m (12)	14.40	9.50	5.45	370	2	3.117
36> () Rameauite - K ₂ Ca(UO ₂) ₆ O ₈ ·9H ₂ O	+	25- 631	36.0	0.00	3		C*/c (15)	13.97	14.26	13.88	1214	4	5.550
37> () Chamosite-IT1M#I#b\RG - (Fe,A		21-1227	36.0	-12	3		A2/m (12)	14.16	9.29	5.37	350	2	3.117
38> () Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	39-1373	36.0	0.00	13		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
39> () Montmorillonite-21A - Na _{0.3} (Al,M		29-1499	36.0	0.00	2		P ()	5.21	5.21	22.00	517	1	
40> () Berthierine-IT1H\RG - (Fe,Al) ₃ (		31- 618	37.3	-12	3		P ()	5.41	5.41	7.11	181	1	

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

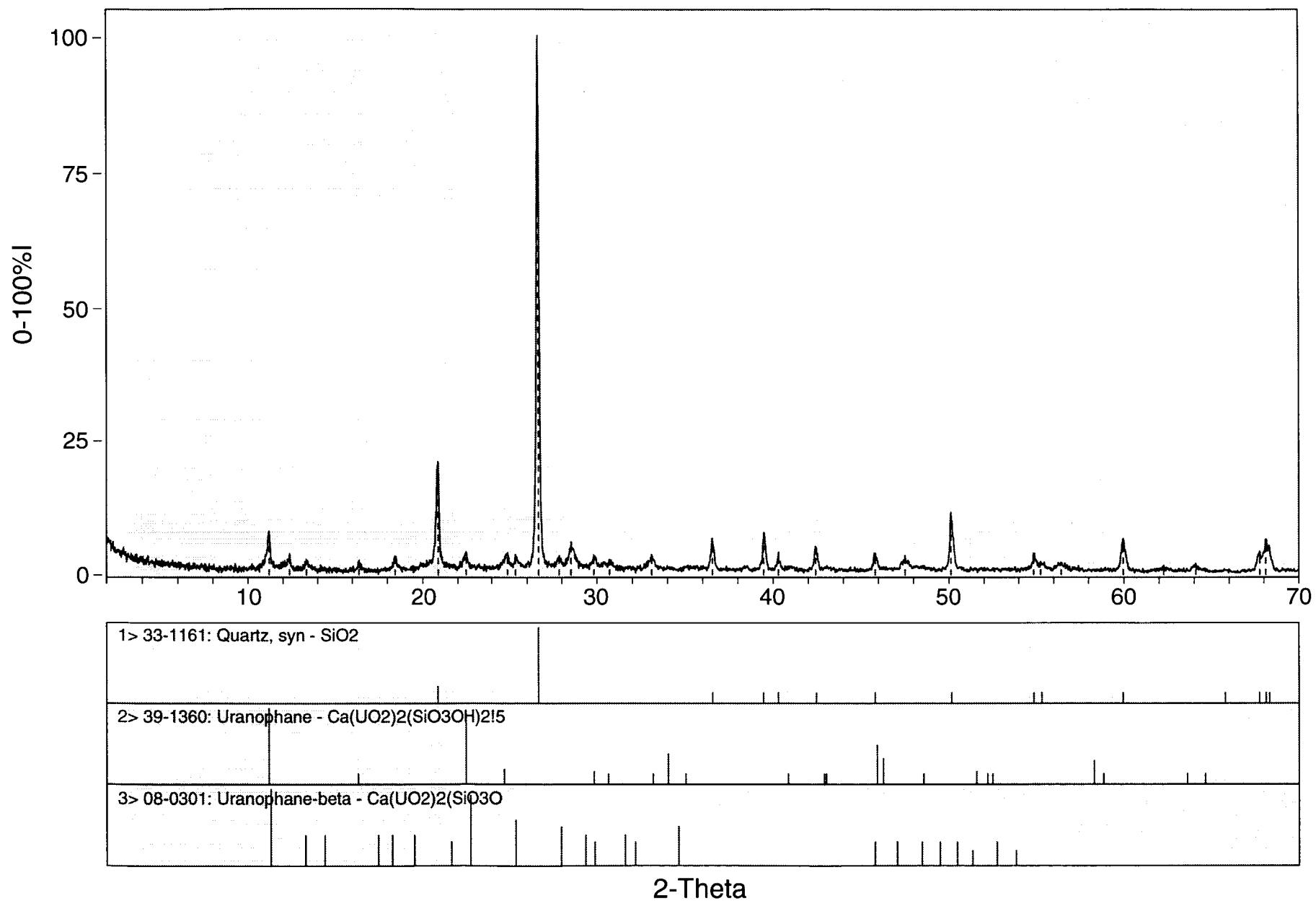
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/31/94 - NOPI-271-XRD1

File: NOPI2711.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

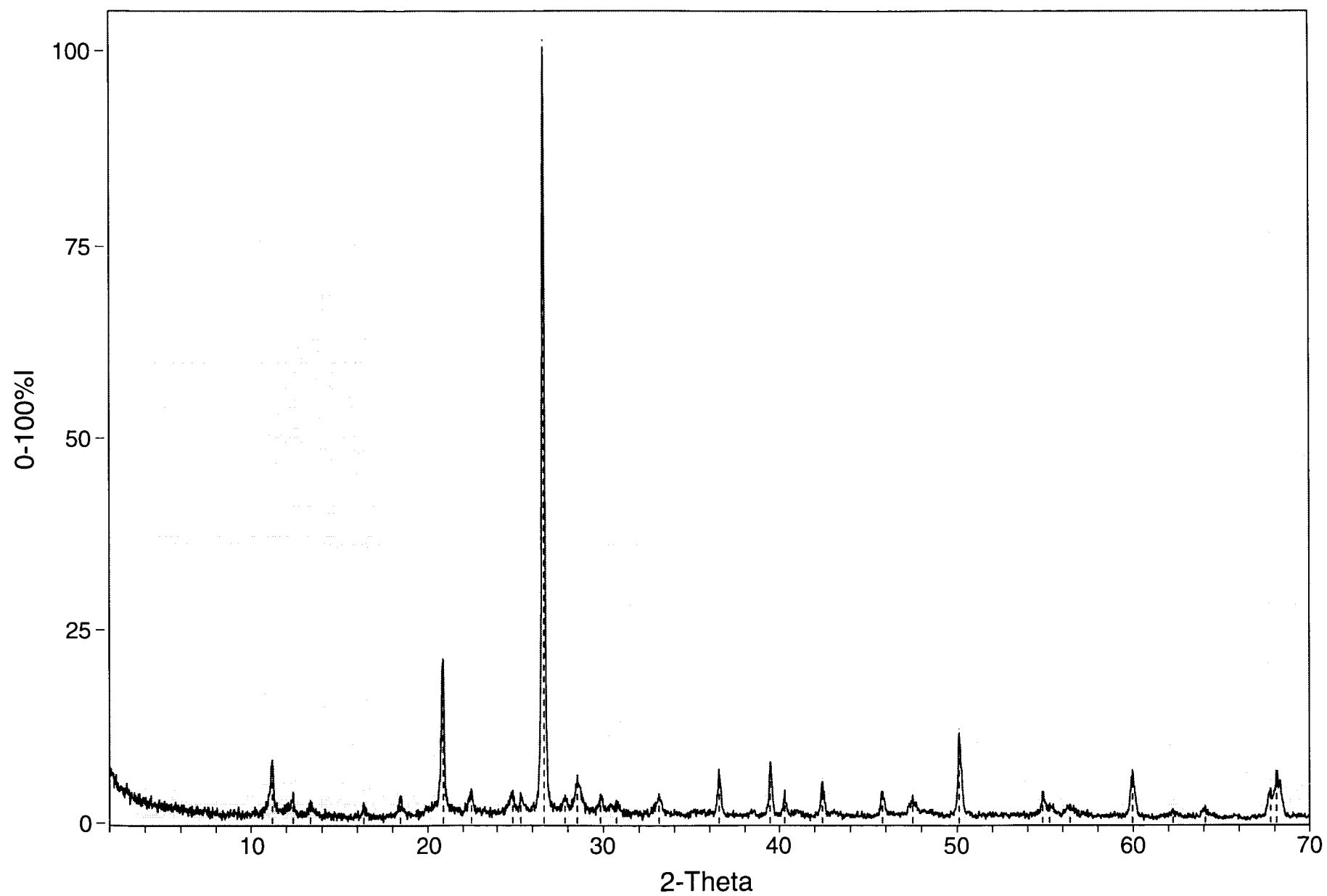


ID: 1/31/94 - NOPI-271-XRD1

File: NOPI2711.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2711.MDI> 1/31/94 - NOPI-271-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = .5-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.199	7.8947	11.180	7.9076	14	99	7.2	1139	8.4	0.207
2:	12.377	7.1454	12.364	7.1533	13	43	3.1	346	2.5	0.145
3:	13.360	6.6221	13.362	6.6212	14	27	2.0	218	1.6	0.145
4:	16.359	5.4141	16.367	5.4116	9	30	2.2	237	1.7	0.142
5:	18.437	4.8083	18.436	4.8087	10	40	2.9	474	3.5	0.213
6:	20.875	4.2519	20.845	4.2581	15	283	20.5	3261	23.9	0.207
7:	22.497	3.9490	22.487	3.9507	17	45	3.3	539	4.0	0.216
8:	24.894	3.5739	24.877	3.5762	19	41	3.0	391	2.9	0.172
9:	25.339	3.5121	25.345	3.5112	20	35	2.5	195	1.4	0.100
10:	26.655	3.3416	26.639	3.3436	23	1382	100.0	13636	100.0	0.178
11:	27.835	3.2025	27.837	3.2024	21	30	2.2	286	2.1	0.172
12:	28.517	3.1275	28.537	3.1254	22	68	4.9	928	6.8	0.246
13:	29.818	2.9940	29.827	2.9930	19	34	2.5	294	2.2	0.156
14:	30.717	2.9084	30.719	2.9082	16	31	2.2	124	0.9	0.072
15:	33.115	2.7030	33.113	2.7032	12	43	3.1	684	5.0	0.286
16:	36.535	2.4575	36.543	2.4569	13	87	6.3	895	6.6	0.185
17:	39.475	2.2809	39.492	2.2800	12	98	7.1	1038	7.6	0.191
18:	40.294	2.2365	40.299	2.2362	11	57	4.1	409	3.0	0.129
19:	42.433	2.1285	42.439	2.1282	10	64	4.6	731	5.4	0.206
20:	45.812	1.9791	45.817	1.9789	13	48	3.5	535	3.9	0.201
21:	47.511	1.9122	47.512	1.9122	12	40	2.9	668	4.9	0.301
22:	50.113	1.8188	50.144	1.8178	12	164	11.9	1785	13.1	0.196
23:	54.852	1.6724	54.874	1.6718	12	54	3.9	487	3.6	0.162
24:	55.251	1.6612	55.255	1.6611	13	30	2.2	402	2.9	0.241
25:	56.428	1.6294	56.424	1.6295	12	22	1.6	377	2.8	0.308
26:	59.968	1.5413	59.973	1.5412	9	86	6.2	1256	9.2	0.263
27:	62.268	1.4898	62.265	1.4899	8	17	1.2	113	0.8	0.120
28:	64.087	1.4518	64.072	1.4522	8	27	2.0	319	2.3	0.213
29:	67.766	1.3817	67.810	1.3809	7	54	3.9	1524	11.2	0.508
30:	68.108	1.3756	68.126	1.3753	8	86	6.2	2283	16.7	0.478

* Intensity values are based on counts per second.

NOPI2711.MDI> 1/31/94 - NOPI-271-XRD1

40 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	()	Quartz, syn - SiO2	+	33-1161	0.3	0.00	96	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	1.3	0.00	96		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	()	Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	1.9	0.06	52		P21/* (11)	8.98	6.73	5.15	311	2	2.977
4>	()	Augelite - Al2(PO4)(OH)3	+	34- 151	2.3	0.00	90		I2/m (12)	12.15	8.01	5.08	247	4	2.687
5>	()	Moganite [NR] - SiO2	+	38- 360	2.9	0.00	44		I ()	8.53	10.76	4.93	226	12	2.645
6>	()	Bonshtedtite - Na3Fe(PO4)(CO3)	+	35- 678	3.1	-0.12	59		P21/m (11)	8.92	6.63	5.15	305	2	3.050
7>	()	Lanarkite, syn - Pb2OSO4	+	37- 516	3.7	0.12	31		I2/m (12)	12.43	5.70	7.08	250	4	6.999
8>	()	Sanidine, disordered - K(Si3Al)O	+	25- 618	3.7	0.00	44		I2/m (12)	8.45	13.03	7.18	362	4	2.556
9>	()	Unnamed mineral, syn [NR] - Fe3(	+	37- 481	4.0	0.00	65		P21/n (14)	9.10	10.05	8.02	672	4	3.710
10>	()	Lanarkite, syn - Pb2(SO4)O	+	33-1486	4.0	0.12	31		I2/m (12)	12.42	5.70	7.07	249	4	7.019
11>	()	Orthoclase, barian - (K,Ba)(Si,A	+	19- 3	4.2	0.00	44		I2/m (12)	8.50	13.06	7.20	365	4	
12>	()	Gismondine - CaAl2Si2O8·4H2O	+	39-1373	4.2	0.06	21		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
13>	()	Wollastonite-IT1A\RG - CaSiO3	+	27-1064	4.3	-0.12	31		P-1 (2)	7.33	7.93	7.07	399	6	2.903
14>	()	Giniite - FeFe4(PO4)4(OH)2·2H2O	+	33- 669	4.5	0.06	52		C*** (65)	10.36	26.58	5.16	711	4	3.405
15>	()	Akaganeite-ITM\RG, syn - FeO(OH	+	34-1266	4.6	0.00	59		I4/m (87)	10.53	10.53	3.03	168	8	3.510
16>	()	Dumontite - Pb2(UO2)3(PO4)2(OH)4	+	12- 158	4.9	0.06	21		P21/m (11)	8.16	16.73	7.02	901	2	5.666
17>	()	Foggite - CaAl(PO4)(OH)2·H2O	+	29- 282	5.0	-0.06	21		A2122 (20)	9.27	21.32	5.19	513	8	2.772
18>	()	Khademite - Al(SO4)(OH)·5H2O	+	26-1011	5.1	-0.06	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
19>	()	Despujolsite - Ca3Mn(SO4)2(OH)6	+	20- 226	5.2	0.06	59		P-62c (190)	8.56	8.56	10.76	683	2	2.546
20>	()	Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	5.4	0.06	59		A2/a (15)	20.16	9.00	5.19	469	4	2.790
21>	()	Barboselite - FeFe2(PO4)2(OH)2	+	33- 668	5.8	0.06	52		P21/n (14)	7.40	7.49	7.31	356	2	3.652
22>	()	Celsian, syn - BaAl2Si2O8	+	38-1450	5.9	0.06	79		I2/m (12)	8.59	13.05	7.20	368	4	3.390
23>	()	Lipscombite, manganoan - (Fe,Mn)	+	14- 310	5.9	-0.12	31		P41212 (92)	7.40	7.40	12.81	701	4	3.660
24>	()	Rostite - Al(SO4)(OH)·5H2O	+	41-1382	6.0	0.06	20		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
25>	()	Tridymite-IT20H\RG, syn - SiO2	+	14- 260	6.0	0.06	21		P ()	9.92	9.92	81.50	6946	160	2.298
26>	()	Dorfmanite, syn - Na2HPO4·2H2O	+	10- 190	6.0	0.06	52		P ()	10.34	16.82	6.60	1148	8	2.060
27>	()	Caminite - Mg3(SO4)2(OH)2	+	39- 359	6.1	-0.06	52		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
28>	()	Tungusite - Ca4Fe2Si6O15(OH)6	+	19- 231	6.8	0.00	11								2.590
29>	()	Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	7.8	0.06	52		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
30>	()	Epsomite, syn - MgSO4·7H2O	+	36- 419	9.5	-0.12	14		P212121 (19)	11.87	11.98	6.85	974	4	1.681
31>	()	Alamosite - PbSiO3	+	29- 782	9.5	0.06	59		Pn (7)	12.25	7.06	11.24	893	12	6.319
32>	()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	10.6	-0.12	17		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
33>	()	Microcline, ordered - KAlSi3O8	+	19- 926	10.9	-0.12	17		P-1 (2)	7.62	7.92	7.22	361	2	2.561
34>	()	Liveingite - Pb9As13S28	+	31- 678	10.9	0.06	3		P21/m (11)	8.34	70.84	7.94	4691	4	5.291
35>	()	Penikisite - Ba(Mg,Fe)2Al2(PO4)3	+	29- 169	11.2	-0.12	4		P*, -1 (2)	9.00	12.07	4.92	525	2	3.790
36>	()	Rameauite - K2Ca(UO2)6O8·9H2O	+	25- 631	12.1	-0.06	3		C*/c (15)	13.97	14.26	13.88	1214	4	5.550
37>	()	Illite-montmorillonite - K0.5Al2	+	35- 652	13.0	0.00	44			8.90	13.00	5.20	602		
38>	()	Dundasite - Pb2Al4(CO3)4(OH)8·3H	+	21- 936	13.6	0.12	5		Pbmm (51)	9.05	16.35	5.61	830	2	3.811
39>	()	Kulanite - Ba(Fe,Mn,Mg)2Al2(PO4)	+	29- 170	13.6	0.00	4		P-1 (2)	9.03	12.12	4.94	531	2	3.910
40>	()	Savrite - Pb2(UO2)5O6(OH)2·4H2O	+	35- 601	13.7	0.06	4		P21/n (14)	13.62	6.96	10.70	966	2	6.759

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

NOPI2711.MDI> 1/31/94 - NOPI-271-XRDI

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
()	Tungusite - $\text{Ca}_4\text{Fe}_2\text{Si}_6\text{O}_{15}(\text{OH})_6$		19- 231	1.0	0.00	11								2.590
2>()	Penikisite - $\text{Ba}(\text{Mg},\text{Fe})_2\text{Al}_2(\text{PO}_4)_3$	+	29- 169	1.0	-0.12	4		$\text{P}^*, -1 (2)$	9.00	12.07	4.92	525	2	3.790
3>()	Khademite - $\text{Al}(\text{SO}_4)(\text{OH})\cdot 5\text{H}_2\text{O}$	+	26-1011	1.1	0.00	17		$\text{Pcab} (61)$	11.18	13.06	10.89	1589	8	1.924
4>()	Epsomite, syn - $\text{MgSO}_4\cdot 7\text{H}_2\text{O}$	+	36- 419	1.1	-0.12	14		$\text{P212121} (19)$	11.87	11.98	6.85	974	4	1.681
5>()	Uranophane - $\text{Ca}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2\cdot 5\text{H}_2\text{O}$	+	39-1360	1.2	0.00	8		$\text{P21} (4)$	15.92	7.01	6.67	739	2	3.849
6>()	Rapidcreekite - $\text{Ca}_2(\text{CO}_3)\text{SO}_4\cdot 4\text{H}_2\text{O}$	+	39- 351	1.3	-0.12	7		$\text{Pcnb} (60)$	15.49	19.18	6.16	1829	8	2.239
7>()	Forsterite, syn - Mg_2SiO_4	+	34- 189	1.3	0.00	6		$\text{Pmnb} (62)$	5.98	10.20	4.76	290	4	3.222
8>()	Kulanite - $\text{Ba}(\text{Fe},\text{Mn},\text{Mg})_2\text{Al}_2(\text{PO}_4)_3$	+	29- 170	1.4	0.00	4		$\text{P}-1 (2)$	9.03	12.12	4.94	531	2	3.910
9>()	Rostite - $\text{Al}(\text{SO}_4)(\text{OH})\cdot 5\text{H}_2\text{O}$	+	41-1382	1.4	0.00	19		$\text{Pcab} (61)$	11.19	13.06	10.89	1591	8	1.921
10>()	Potassium alum, syn - $\text{KAl}(\text{SO}_4)_2\cdot 12\text{H}_2\text{O}$	+	7- 17	1.4	0.12	11		$\text{Pa3} (205)$	12.16	12.16	12.16	1797	4	1.754
11>()	Glauberite, syn - $\text{Na}_2\text{Ca}(\text{SO}_4)_2$	+	19-1187	1.6	0.00	5	0.8	$\text{C2/c} (15)$	10.13	8.30	8.53	332	4	2.780
12>()	Purpurite - $(\text{Mn},\text{Fe})\text{PO}_4$		37- 478	1.7	0.12	14		$\text{Pmnb} (62)$	5.82	9.77	4.78	272	4	
13>()	Heterosite - $(\text{Fe},\text{Mn})\text{PO}_4$	+	34- 134	1.7	-0.06	6		$\text{Pmnb} (62)$	5.82	9.82	4.79	274	4	3.400
14>()	Strengite - $\text{FePO}_4\cdot 2\text{H}_2\text{O}$	+	33- 667	1.7	0.00	5		$\text{Pbca} (61)$	9.89	10.12	8.72	873	8	2.844
15>()	Protasite - $\text{Ba}(\text{UO}_2)_3\text{O}_3(\text{OH})_2\cdot 3\text{H}_2\text{O}$	+	39- 349	1.7	0.06	5		$\text{Pn} (7)$	12.30	7.22	6.96	618	2	5.827
16>()	Mellite - $\text{C}_{12}\text{Al}_2\text{O}_{12}\cdot 16\text{H}_2\text{O}$	+	42-1501	1.7	0.00	4	0.1	$\text{I41/acd} (142)$	15.55	15.55	23.21	2806	8	1.606
17>()	Sapphirine-IT2MVRG - $(\text{Mg},\text{Al})_4(\text{A})_2\text{Si}_2\text{O}_{12}$		19- 750	1.7	-0.06	6	3.5	$\text{P21/c} (14)$	9.94	14.43	9.79	1317	4	3.476
18>()	Dumontite - $\text{Pb}_2(\text{UO}_2)_3(\text{PO}_4)_2(\text{OH})_4$		12- 158	1.7	0.00	14		$\text{P21/m} (11)$	8.16	16.73	7.02	901	2	5.666
19>()	Bulachite - $\text{Al}_2(\text{AsO}_4)(\text{OH})\cdot 3\cdot 3\text{H}_2\text{O}$		37- 482	1.8	-0.12	7			15.53	17.78	7.03	1941	10	2.549
20>()	Foggite - $\text{CaAl}(\text{PO}_4)(\text{OH})\cdot 2\text{H}_2\text{O}$		29- 282	1.8	0.00	14		$\text{A2122} (20)$	9.27	21.32	5.19	513	8	2.772
21>()	Mundite - $\text{Al}(\text{UO}_2)_3(\text{PO}_4)_2(\text{OH})\cdot 3\cdot 5\text{H}_2\text{O}$		35- 535	1.8	-0.12	8		$\text{P}^*\text{cn} (62)$	17.08	30.98	13.76	7281	16	4.295
22>()	Hollandite, ferrian - $\text{BaFeMn}_7\text{O}_{16}$	+	12- 514	1.8	0.12	5		$\text{P21/n} (14)$	10.02	5.76	9.89	571	2	4.851
23>()	Sayrite - $\text{Pb}_2(\text{UO}_2)_5\text{O}_6(\text{OH})_2\cdot 4\text{H}_2\text{O}$		35- 601	1.9	0.00	5		$\text{P21/n} (14)$	13.62	6.96	10.70	966	2	6.759
24>()	Uranophane-beta - $\text{Ca}(\text{UO}_2)_2(\text{SiO}_3\text{OH})_2\cdot 5\text{H}_2\text{O}$	+	8- 301	1.9	0.00	5		$\text{P21/a} (14)$	14.01	15.55	6.64	1446	4	3.933
25>()	Hydroxypophyllite - $\text{KCa}_4\text{Si}_8\text{O}_{20}(\text{OH})_4$	+	30- 920	1.9	-0.12	8	0.8	$\text{P4/mnc} (128)$	8.98	8.98	15.83	1276	2	2.356
26>()	Bergenerite - $\text{Ba}(\text{UO}_2)_4(\text{PO}_4)_2(\text{OH})_4\cdot 12\text{H}_2\text{O}$		20- 154	2.0	-0.12	7		$\text{Bmmb} (63)$	16.05	17.76	13.86	1975	6	4.084
27>()	Alleghanyite, magnesian - $\text{Mg}_2\text{Mn}_3(\text{PO}_4)_3$	+	39-1348	2.0	-0.12	4	0.8	$\text{P21/a} (14)$	10.57	4.82	8.08	390	2	3.678
28>()	Kovdorskite - $\text{Mg}_2(\text{PO}_4)(\text{OH})\cdot 3\text{H}_2\text{O}$		33- 861	2.0	0.00	5		$\text{P21/a} (14)$	10.35	12.90	4.74	619	4	2.303
29>()	Autunite - $\text{Ca}(\text{UO}_2)_2(\text{PO}_4)_2\cdot 10\text{H}_2\text{O}$	+	41-1353	2.0	-0.06	4		$\text{I4/mmm} (139)$	7.01	7.01	20.74	509	2	3.098
30>()	Pargasite, syn - $\text{NaCa}_2\text{Mg}_4\text{Al}(\text{Si}_6\text{Al})_2\text{O}_{22}$	+	41-1430	2.1	0.00	5		$\text{I2/m} (12)$	9.89	17.94	5.28	452	2	3.073
31>()	Kamitugaite - $\text{PbAl}(\text{UO}_2)_5(\text{P},\text{As})\text{O}_{14}$		37- 425	2.1	0.06	8		$\text{P}^*, -1 (2)$	10.98	15.96	9.07	1574	2	
32>()	Purpurite - $(\text{Mn},\text{Fe})\text{PO}_4$		17- 202	2.1	-0.06	5		$\text{Pmnb} (62)$	5.83	9.70	4.77	270	4	3.200
33>()	Wermlandite - $\text{Ca}_2\text{Mg}_{14}(\text{Al},\text{Fe})\text{CO}_3(\text{OH})_2\cdot 12\text{H}_2\text{O}$		25- 153	2.1	0.00	4		$\text{P}^*\text{c1}, -3\text{m} (165)$	9.26	9.26	22.52	1672	1	1.932
34>()	Cordierite - $\text{Mg}_2\text{Al}_4\text{Si}_5\text{O}_{18}$	+	12- 303	2.1	0.00	5		$\text{Cccm} (66)$	9.74	17.08	9.35	777	4	2.499
35>()	Kvanefjeldite - $\text{Na}_4(\text{Ca},\text{Mn})_2(\text{Si}_3\text{O}_7)_2$	+	37- 433	2.1	0.00	5		$\text{Pcab} (61)$	10.21	15.88	9.06	1469	4	2.550
36>()	Dundasite - $\text{Pb}_2\text{Al}_4(\text{CO}_3)_4(\text{OH})_8\cdot 3\text{H}_2\text{O}$	+	21- 936	2.1	0.00	7		$\text{Pbmm} (51)$	9.05	16.35	5.61	830	2	3.811
37>()	Gismondine - $\text{CaAl}_2\text{Si}_2\text{O}_8\cdot 4\text{H}_2\text{O}$	+	39-1373	2.1	0.00	14		$\text{P21/c} (14)$	10.02	10.64	9.84	1047	4	2.221
38>()	Tridymite-IT20HVRG, syn - SiO_2		14- 260	2.2	0.00	14		$\text{P} ()$	9.92	9.92	81.50	6946	160	2.298
39>()	Sjogrenite - $\text{Mg}_6\text{Fe}_2\text{CO}_3(\text{OH})_{16}\cdot 4\text{H}_2\text{O}$		14- 281	2.2	-0.06	5		$\text{P63/mmc} (194)$	3.09	3.09	15.56	129		2.132
40>()	Orientite - $\text{Ca}_2\text{MnMn}_2(\text{Si}_3\text{O}_{10})(\text{OH})_2$	+	41- 589	2.2	0.12	4	0.6	$\text{Bmmb} (63)$	9.07	19.13	6.12	531	4	3.484

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

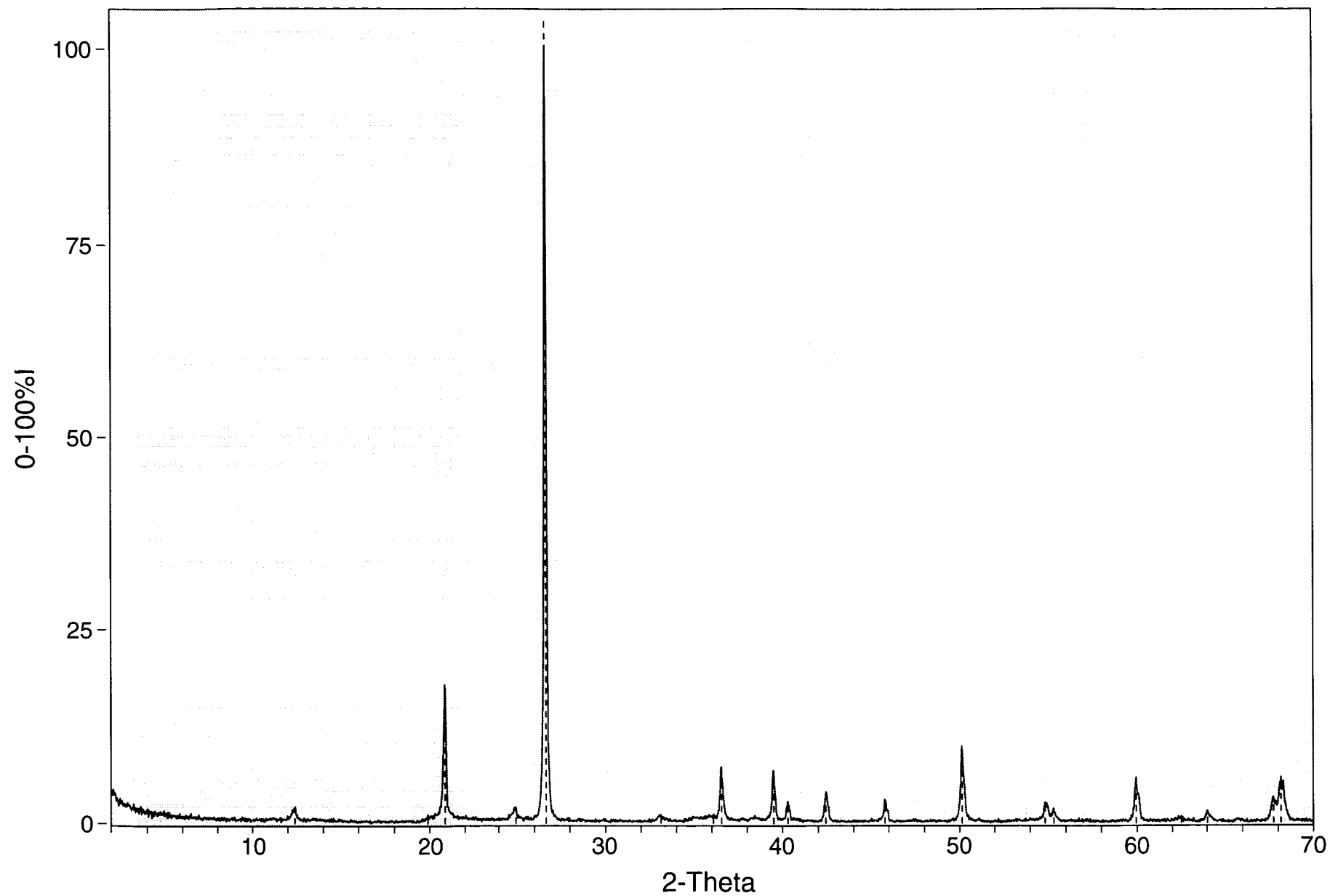
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 1/31/94 - NOPI-272-XRD1

File: NOPI2721.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

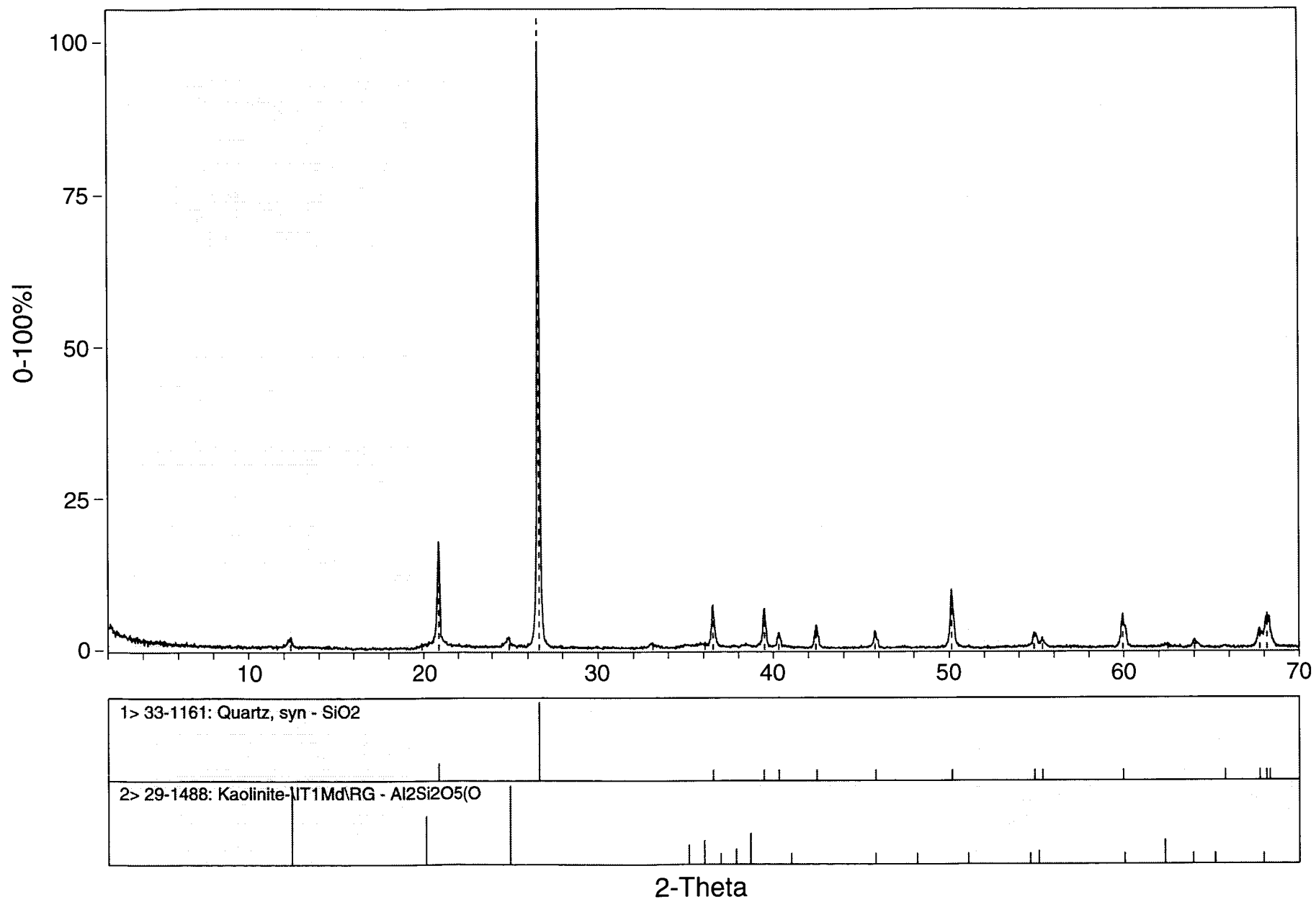


ID: 1/31/94 - NOPI-272-XRD1

File: NOPI2721.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Thu Feb 03 1994 @9:22am

File: NOPI2721.MDI> 1/31/94 - NOPI-272-XRD1

----- Scan Parameters: -----
 Radiation = CU_1.540598
 Scan Range = 2 - 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----
 Filter length(pts) = 25
 Noise level(sigmas) = 3.0
 Intensity cutoff(%) = .5-100
 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.392	7.1369	12.369	7.1500	10	48	1.8	519	2.1	0.195
2:	19.893	4.4595	19.907	4.4565	9	24	0.9	187	0.8	0.140
3:	20.871	4.2527	20.855	4.2560	9	447	17.1	5226	21.5	0.210
4:	24.949	3.5661	24.924	3.5697	12	49	1.9	443	1.8	0.163
5:	26.651	3.3421	26.641	3.3433	11	2620	100.0	24280	100.0	0.167
6:	33.109	2.7035	33.102	2.7041	6	29	1.1	424	1.7	0.263
7:	36.069	2.4881	36.058	2.4889	8	25	1.0	1070	4.4	0.770
8:	36.549	2.4565	36.551	2.4564	10	179	6.8	1968	8.1	0.198
9:	39.488	2.2802	39.482	2.2806	9	167	6.4	1731	7.1	0.187
10:	40.290	2.2367	40.297	2.2363	12	65	2.5	573	2.4	0.159
11:	42.429	2.1287	42.446	2.1279	6	100	3.8	1111	4.6	0.200
12:	45.769	1.9808	45.788	1.9800	5	75	2.9	917	3.8	0.220
13:	50.128	1.8183	50.150	1.8176	5	258	9.8	3135	12.9	0.219
14:	54.848	1.6725	54.883	1.6715	7	66	2.5	1017	4.2	0.277
15:	55.325	1.6592	55.294	1.6600	7	48	1.8	690	2.8	0.259
16:	59.945	1.5419	59.966	1.5414	6	142	5.4	2050	8.4	0.260
17:	62.522	1.4844	62.504	1.4848	5	23	0.9	203	0.8	0.159
18:	64.024	1.4531	64.045	1.4527	4	38	1.5	555	2.3	0.263
19:	67.743	1.3821	67.791	1.3813	5	82	3.1	2264	9.3	0.497
20:	68.164	1.3746	68.170	1.3745	6	147	5.6	3675	15.1	0.450

* Intensity values are based on counts per second.

NOPI2721.MDI> 1/31/94 - NOPI-272-XRD1

40 Hits Sorted on Figure-Of-Merit

	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>() Quartz, syn - SiO2	+	33-1161	0.3	0.00	96	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>() Gismondine - CaAl2Si2O8·4H2O	+	20- 452	2.9	0.06	54		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>() Bonshtedtite - Na3Fe(PO4)(CO3)	+	35- 678	8.5	-0.12	54		P21/m (11)	8.92	6.63	5.15	305	2	3.050
4>() Moganite [NR] - SiO2		38- 360	8.8	-0.06	86		I ()	8.53	10.76	4.93	226	12	2.645
5>() Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	10.7	0.06	44		P21/* (11)	8.98	6.73	5.15	311	2	2.977
6>() Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	13.4	0.06	54		P-62c (190)	8.56	8.56	10.76	683	2	2.546
7>() Caminite - Mg3(SO4)2(OH)2	+	39- 359	18.4	0.12	38		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
8>() Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	18.5	0.06	54		A2/a (15)	20.16	9.00	5.19	469	4	2.790
9>() Wollastonite-IT1A\RG - CaSiO3		27-1064	21.1	-0.12	25		P-1 (2)	7.33	7.93	7.07	399	6	2.903
10>() Lipscombite, manganoan - (Fe,Mn)	+	14- 310	21.5	-0.12	25		P41212 (92)	7.40	7.40	12.81	701	4	3.660
11>() Augelite - Al2(PO4)(OH)3	+	34- 151	21.6	0.12	38		I2/m (12)	12.15	8.01	5.08	247	4	2.687
12>() Giniite - FeFe4(PO4)4(OH)2·2H2O		33- 669	23.6	0.06	44		C*** (65)	10.36	26.58	5.16	711	4	3.405
13>() Lanarkite, syn - Pb2OSO4	+	37- 516	24.6	0.12	25		I2/m (12)	12.43	5.70	7.08	250	4	6.999
14>() Orthoclase, barian - (K,Ba)(Si,A		19- 3	24.7	0.00	38		I2/m (12)	8.50	13.06	7.20	365	4	
15>() Unnamed mineral, syn [NR] - Fe3(	+	37- 481	25.2	0.00	58		P21/n (14)	9.10	10.05	8.02	672	4	3.710
16>() Sanidine, disordered - K(Si3Al)O	+	25- 618	26.6	0.00	38		I2/m (12)	8.45	13.03	7.18	362	4	2.556
17>() Akaganeite-ITM\RG, syn - FeO(OH		34-1266	26.6	0.00	54		I4/m (87)	10.53	10.53	3.03	168	8	3.510
18>() Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	27.7	-0.12	15		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
19>() Barboselite - FeFe2(PO4)2(OH)2	+	33- 668	28.6	0.06	44		P21/n (14)	7.40	7.49	7.31	356	2	3.652
20>() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	29.1	0.06	17		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
21>() Lanarkite, syn - Pb2(SO4)O	+	33-1486	29.6	0.12	25		I2/m (12)	12.42	5.70	7.07	249	4	7.019
22>() Dorfmanite, syn - Na2HPO4·2H2O		10- 190	30.8	0.06	44		P ()	10.34	16.82	6.60	1148	8	2.060
23>() Khademit - Al(SO4)(OH)·5H2O	+	26-1011	32.2	-0.06	15		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
24>() Macaulayite - Fe24Si4O43(OH)2		42- 596	33.9	0.12	3		A ()	36.34	8.73	5.04	798	2	4.523
25>() Gismondine - CaAl2Si2O8·4H2O	+	39-1373	34.5	0.06	15		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
26>() Berthierine-IT1H\RG - (Fe,Al)3(		31- 618	37.3	-0.12	2		P ()	5.41	5.41	7.11	181	1	
27>() Correns site - Mg9(Si,Al)8O20(OH)1		42- 620	37.3	-0.12	3		P ()	5.34	5.34	32.06	791	1	2.031
28>() Epsomite, syn - MgSO4·7H2O	+	36- 419	38.0	-0.12	13		P212121 (19)	11.87	11.98	6.85	974	4	1.681
29>() Vandendriesscheite - PbU7O22·12H		13- 117	42.4	0.06	2		P*c* (51)	40.85	43.33	14.07	>9999	36	5.861
30>() Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10- 446	44.1	0.06	2		Aa (9)	14.42	8.95	5.15	330	4	2.599
31>() Tarasovite [NR] - NaKAl8(Si,Al)1		26- 970	44.1	0.12	4			43.85	8.88	5.13	1997	2	2.360
32>() Alstonite - BaCa(CO3)2	+	27- 32	45.6	-0.12	2		P1 (1)	17.37	17.38	6.12	1603	12	3.698
33>() Gatumbaite - CaAl2(PO4)2(OH)2·H2	+	29- 283	45.8	0.00	2		P*/* (10)	10.76	5.09	6.91	379	2	2.946
>() Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	47.5	0.00	2		A*/* (12)	7.39	8.93	5.16	165	2	2.601
>() Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	47.5	0.12	6								2.590
36>() Spinel, ferrian - Mg(Al,Fe)2O4		21- 540	48.0	0.12	4		Fd3m (227)	8.19	8.19	8.19	137	8	
37>() Kaolinite-IT1A\RG - Al2Si2O5(OH	+	14- 164	48.0	0.12	2		P-1 (2)	7.41	8.96	5.16	330	2	2.595
38>() Foggite - CaAl(PO4)(OH)2·H2O		29- 282	48.4	-0.12	11		A2122 (20)	9.27	21.32	5.19	513	8	2.772
39>() Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	50.0	0.06	44		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
40>() Unnamed mineral [NR] - K0.8Na0.7		34- 542	50.4	0.12	2		Ama2 (40)	14.28	14.31	9.91	1013	2	1.091

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

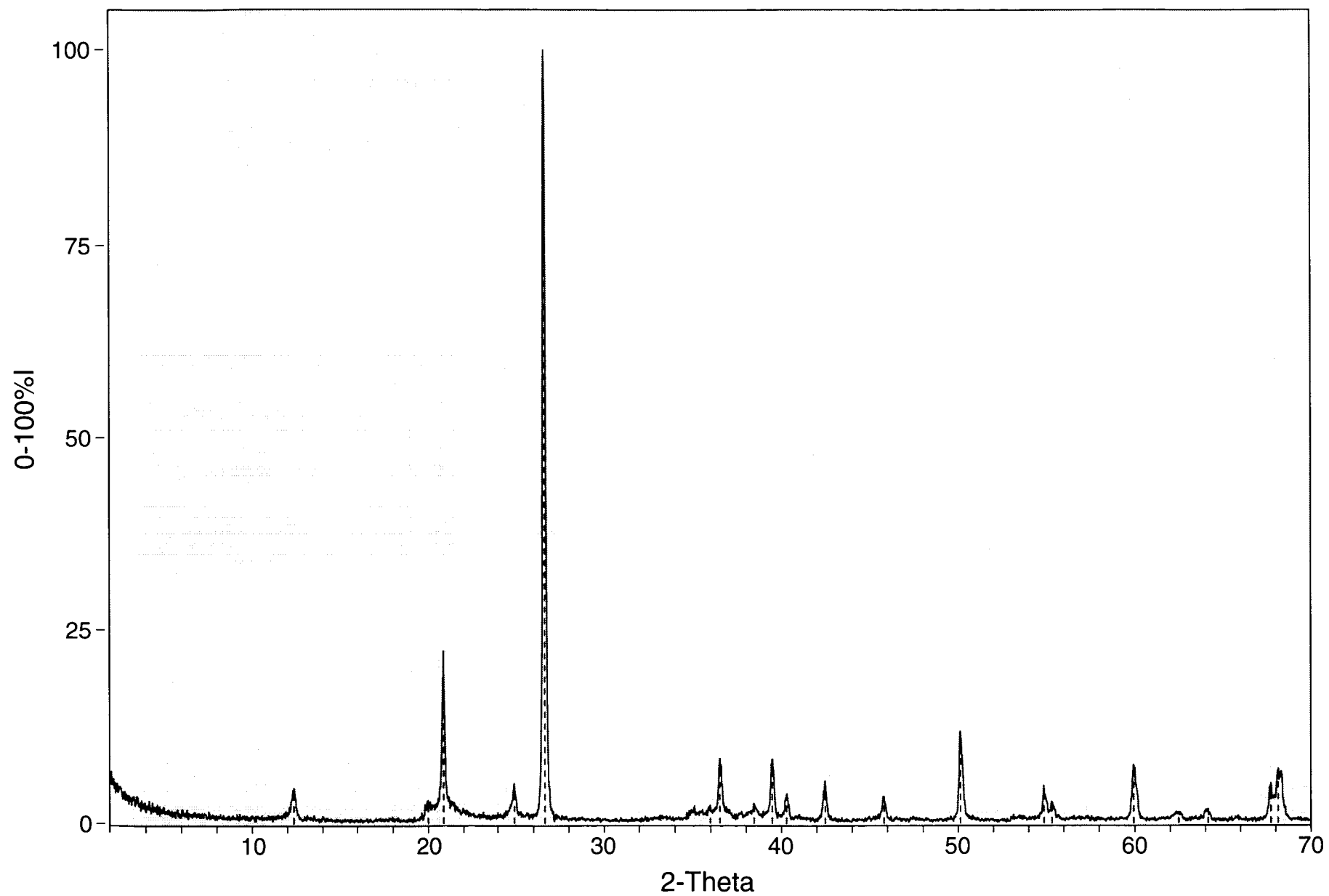
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/2/94 - NOPI-273-XRD1

File: NOPI2731.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

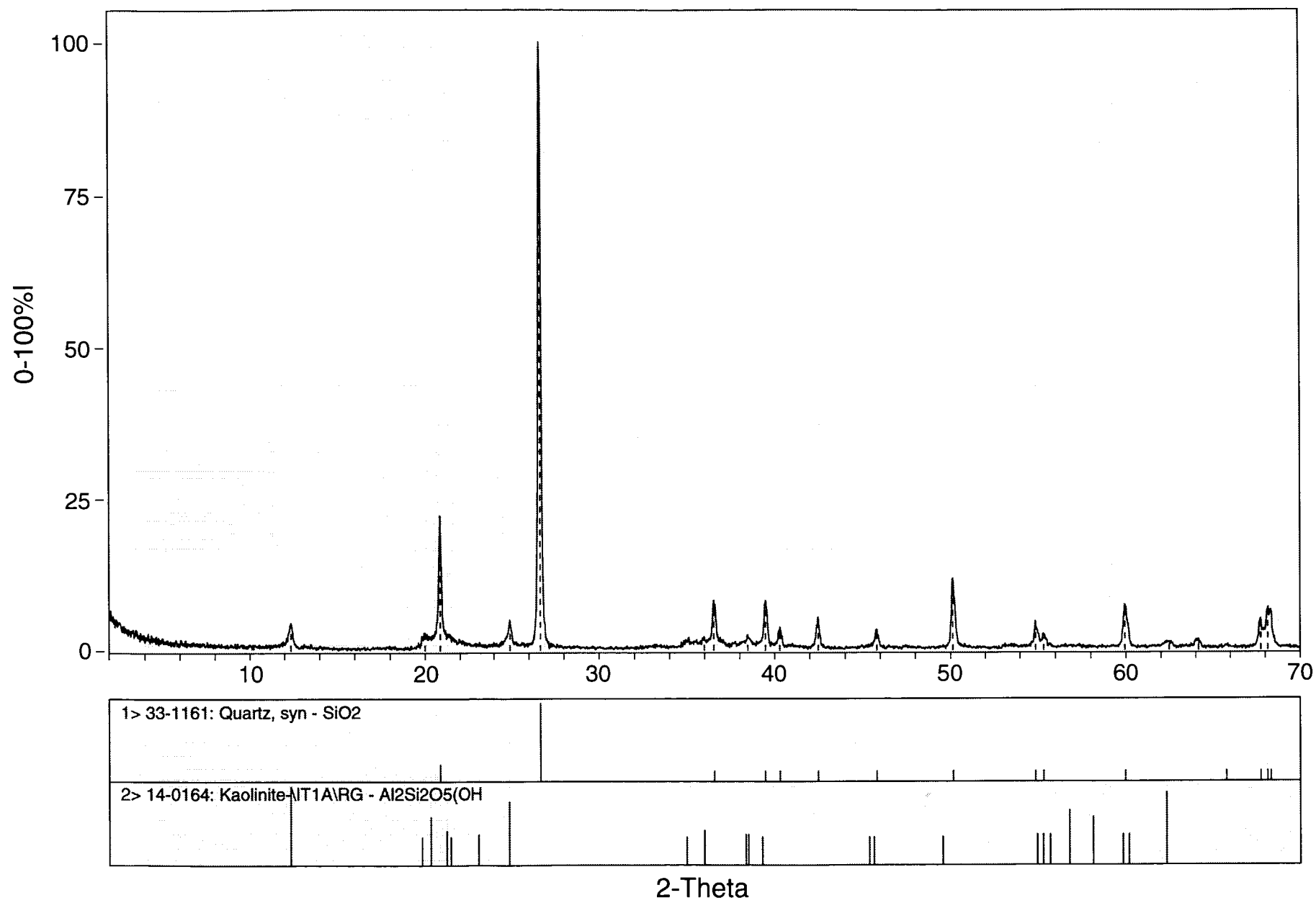


ID: 2/2/94 - NOPI-273-XRD1

File: NOPI2731.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2731.MDI> 2/2/94 - NOPI-273-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = .5-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.362	7.1542	12.337	7.1686	8	61	4.1	879	5.6	0.259
2:	20.004	4.4351	20.017	4.4323	11	36	2.4	671	4.3	0.335
3:	20.864	4.2542	20.861	4.2549	8	337	22.5	5514	35.0	0.295
4:	24.905	3.5724	24.892	3.5741	13	66	4.4	720	4.6	0.196
5:	26.645	3.3429	26.639	3.3436	11	1496	100.0	15734	100.0	0.189
6:	35.985	2.4938	35.997	2.4930	10	30	2.0	387	2.5	0.232
7:	36.528	2.4579	36.542	2.4570	12	118	7.9	1612	10.2	0.246
8:	38.448	2.3395	38.456	2.3390	13	26	1.7	251	1.6	0.174
9:	39.467	2.2814	39.471	2.2811	10	120	8.0	1403	8.9	0.210
10:	40.287	2.2368	40.290	2.2367	12	47	3.1	462	2.9	0.177
11:	42.466	2.1269	42.456	2.1274	5	83	5.5	931	5.9	0.202
12:	45.807	1.9793	45.793	1.9799	5	50	3.3	608	3.9	0.219
13:	50.129	1.8183	50.159	1.8173	5	175	11.7	2181	13.9	0.224
14:	54.870	1.6719	54.900	1.6710	5	73	4.9	990	6.3	0.244
15:	55.329	1.6591	55.303	1.6598	6	39	2.6	815	5.2	0.376
16:	59.930	1.5422	59.964	1.5414	6	110	7.4	1632	10.4	0.267
17:	62.469	1.4855	62.449	1.4859	6	20	1.3	302	1.9	0.272
18:	64.149	1.4506	64.128	1.4510	5	28	1.9	298	1.9	0.192
19:	67.750	1.3820	67.791	1.3813	5	74	4.9	1511	9.6	0.368
20:	68.151	1.3748	68.173	1.3745	5	104	7.0	3014	19.2	0.522

* Intensity values are based on counts per second.

NOPI2731.MDI> 2/2/94 - NOPI-273-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>()	Quartz, syn - SiO ₂	+	33-1161	0.3	0.00	99	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>()	Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	3.2	0.06	61		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>()	Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	5.4	0.12	93		P21/* (11)	8.98	6.73	5.15	311	2	2.977
4>()	Moganite [NR] - SiO ₂		38- 360	5.7	-0.12	93		I ()	8.53	10.76	4.93	226	12	2.645
5>()	Berlinite, syn - AlPO ₄	+	10- 423	6.6	0.12	42		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
6>()	Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	6.7	-0.12	61		P21/m (11)	8.92	6.63	5.15	305	2	3.050
7>()	Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	7.0	-0.06	55		I2/m (12)	12.15	8.01	5.08	247	4	2.687
8>()	Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	9.5	0.00	69		P21/n (14)	9.10	10.05	8.02	672	4	3.710
9>()	Akaganeite-\ITM\RG, syn - FeO(OH		34-1266	9.6	0.00	61		I4/m (87)	10.53	10.53	3.03	168	8	3.510
10>()	Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	10.0	-0.06	69		P21/m (12)	12.43	5.70	7.08	250	4	6.999
11>()	Despujolite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	10.1	-0.12	42		P-62c (190)	8.56	8.56	10.76	683	2	2.546
12>()	Lanarkite, syn - Pb ₂ (SO ₄) ₂ O	+	33-1486	11.2	-0.06	69		I2/m (12)	12.42	5.70	7.07	249	4	7.019
13>()	Illite-\IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	11.3	-0.12	42		A2/a (15)	20.16	9.00	5.19	469	4	2.790
14>()	Foggite - CaAl(PO ₄)(OH) ₂ ·H ₂ O		29- 282	12.7	-0.06	20		A2122 (20)	9.27	21.32	5.19	513	8	2.772
15>()	Orthoclase, barian - (K,Ba)(Si,A		19- 3	12.9	0.00	45		I2/m (12)	8.50	13.06	7.20	365	4	
16>()	Sainfeldite - Ca ₅ H ₂ (AsO ₄) ₄ ·H ₂ O		16- 615	14.7	0.12	42		C2/c (15)	18.64	9.81	10.12	918	8	2.990
17>()	Sanidine, disordered - K(Si ₃ Al) ₂ O	+	25- 618	14.8	0.00	45		I2/m (12)	8.45	13.03	7.18	362	4	2.556
18>()	Giniite - FeFe ₄ (PO ₄) ₄ (OH) ₂ ·H ₂ O		33- 669	15.3	0.06	55		C*** (65)	10.36	26.58	5.16	711	4	3.405
19>()	Caminitite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	16.3	0.12	45		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
20>()	Kinoshitalite-\IT1M\RG - BaMg ₃ Al	+	29- 180	16.3	0.12	42		A2/m (12)	10.26	9.25	5.34	250	2	3.421
21>()	Tamarugite - NaAl(SO ₄) ₂ ·H ₂ O	+	19-1186	16.4	-0.12	17		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
22>()	Dorfmanite, syn - Na ₂ HPO ₄ ·H ₂ O		10- 190	16.9	0.06	55		P ()	10.34	16.82	6.60	1148	8	2.060
23>()	Dickite-\IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH	+	10- 446	17.2	-0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
24>()	Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·H ₂ O	+	26-1226	17.6	0.06	55		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
25>()	Barboselite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	19.4	0.06	55		P21/n (14)	7.40	7.49	7.31	356	2	3.652
26>()	Purpurite - (Mn,Fe)PO ₄		37- 478	19.6	0.12	11		Pmn21 (62)	5.82	9.77	4.78	272	4	
27>()	Nacrite-\IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH	+	16- 606	20.4	0.06	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
28>()	Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	21.9	0.06	10								2.590
29>()	Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	22.1	0.00	42		I2/m (12)	8.59	13.05	7.20	368	4	3.390
30>()	Tridymite-\IT20H\RG, syn - SiO ₂		14- 260	22.5	0.00	11		P ()	9.92	9.92	81.50	6946	160	2.298
31>()	Montmorillonite-17A - Ca _{0.2} Al ₂ Si		19- 150	24.0	0.00	2		P ()	5.18	5.18	17.58	409	1	1.936
32>()	Rostite - Al(SO ₄)(OH) ₂ ·H ₂ O	+	41-1382	24.0	0.00	17		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
33>()	Kaolinite-\IT1A\RG - Al ₂ Si ₂ O ₅ (OH	+	14- 164	24.0	0.00	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
>()	Khademite - Al(SO ₄)(OH) ₂ ·H ₂ O	+	26-1011	25.2	-0.12	11		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
>()	Aluminum [NR] - Al	+	4- 787	26.4	0.00	2	3.6	Fm3m (225)	4.05	4.05	4.05	17	4	2.699
36>()	Halloysite-7A - Al ₂ Si ₂ O ₅ (OH) ₄		29-1487	26.4	-0.12	3		P ()	5.13	5.13	7.16	163	1	2.624
37>()	Tuhualite - (Na,K) ₂ Fe ₄ Si ₁₂ O ₃₀ ·H ₂		10- 440	27.4	-0.06	4		Cmca (64)	14.31	17.28	10.11	1250	4	2.890
38>()	Alamosite - PbSiO ₃		29- 782	27.5	-0.12	42		Pn (7)	12.25	7.06	11.24	893	12	6.319
39>()	Clinocllore-\IT1M#I#I#b\RG - (Mg		12- 242	27.6	-0.12	3		A2/m (12)	14.29	9.21	5.32	347	2	
40>()	Macaulayite - Fe ₂₄ Si ₄ O ₄₃ (OH) ₂		42- 596	27.7	0.06	4		A ()	36.34	8.73	5.04	798	2	4.523

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

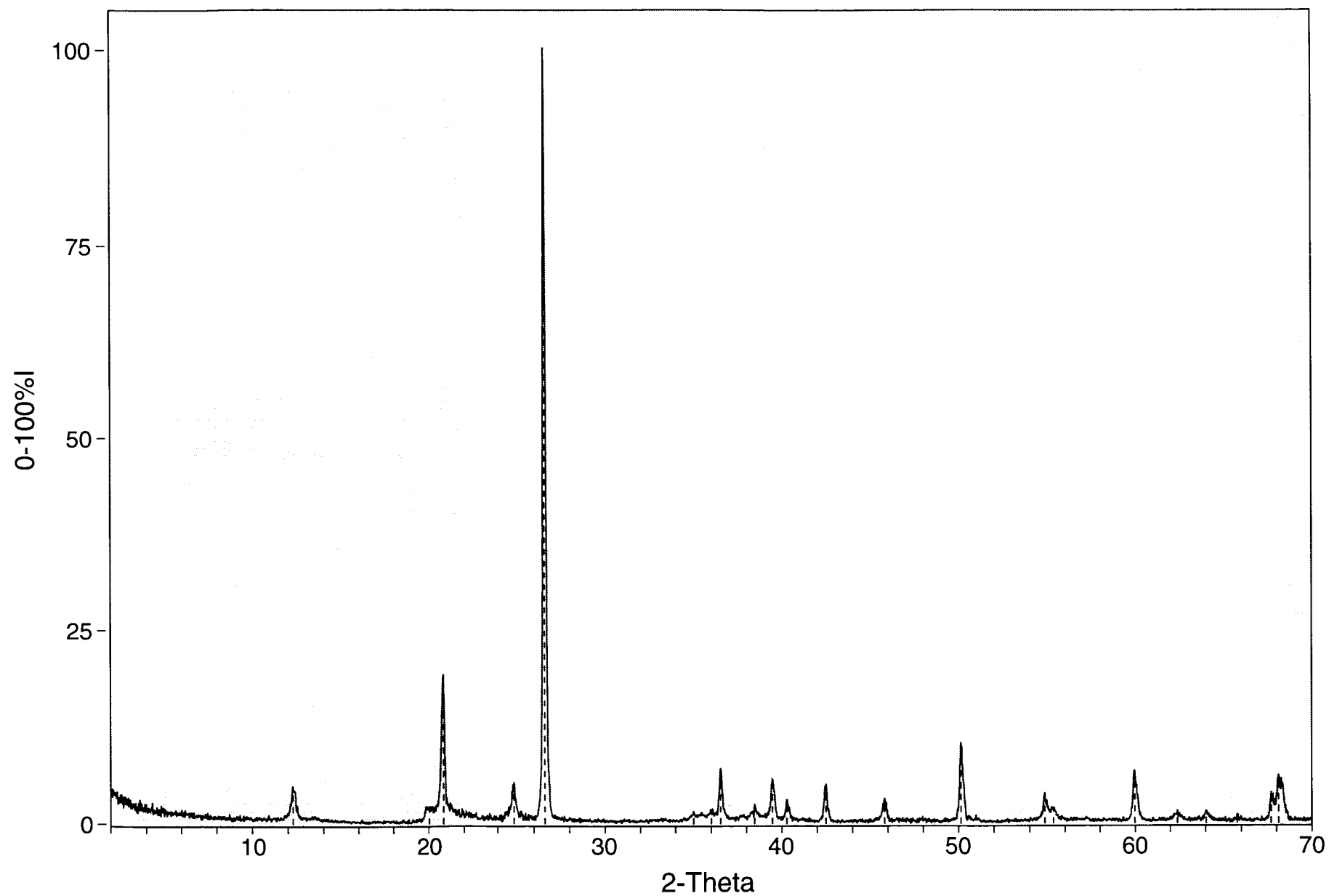
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/2/94 - NOPI-274-XRD1

File: NOPI2741.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

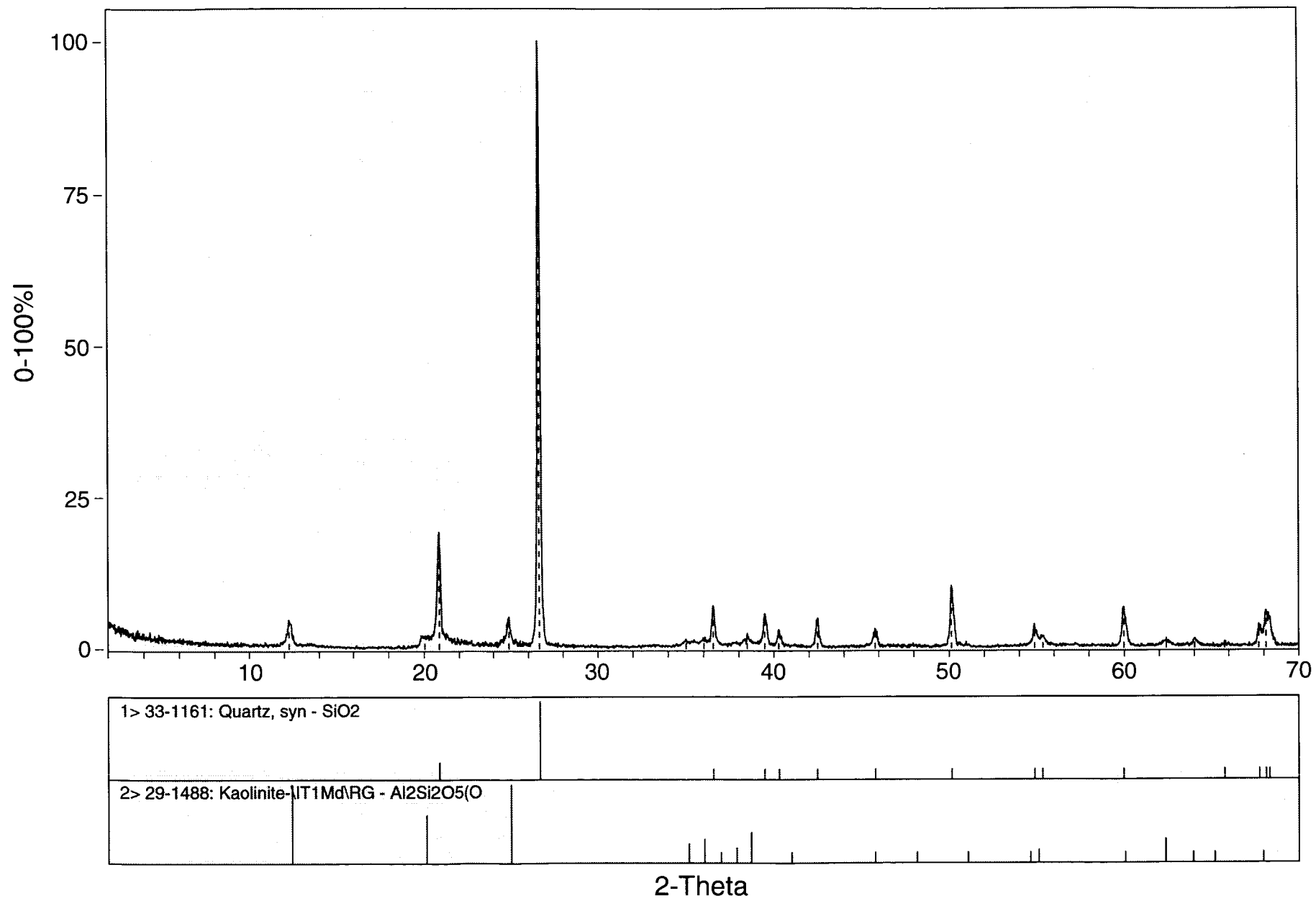


ID: 2/2/94 - NOPI-274-XRD1

File: NOPI2741.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



```

=====
Jade: Peak Listing                               Thu Feb 03 1994 @9:27am
=====
File: NOPI2741.MDI> 2/2/94 - NOPI-274-XRD1

```

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts) = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 3.0
Step Size  = .02                   || Intensity cutoff(%) = .5-100
Count Time = 1 sec.                || 2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.270	7.2076	12.290	7.1963	10	86	4.6	1375	7.3	0.288
2:	20.036	4.4282	20.038	4.4277	11	33	1.8	872	4.6	0.476
3:	20.855	4.2560	20.834	4.2603	8	358	19.2	6416	34.1	0.323
4:	24.879	3.5760	24.859	3.5788	12	87	4.7	1180	6.3	0.244
5:	26.622	3.3456	26.626	3.3451	11	1862	100.0	18800	100.0	0.182
6:	35.010	2.5610	35.006	2.5612	9	24	1.3	211	1.1	0.158
7:	36.010	2.4921	36.016	2.4917	9	33	1.8	552	2.9	0.301
8:	36.532	2.4577	36.545	2.4568	11	130	7.0	1443	7.7	0.200
9:	38.454	2.3391	38.457	2.3389	12	37	2.0	435	2.3	0.212
10:	39.474	2.2810	39.475	2.2809	9	102	5.5	1316	7.0	0.232
11:	40.276	2.2374	40.288	2.2367	11	49	2.6	464	2.5	0.170
12:	42.495	2.1256	42.480	2.1263	4	96	5.2	1088	5.8	0.204
13:	45.800	1.9796	45.792	1.9799	5	56	3.0	743	4.0	0.239
14:	50.126	1.8184	50.163	1.8171	4	199	10.7	2459	13.1	0.222
15:	54.869	1.6719	54.895	1.6712	6	82	4.4	1140	6.1	0.250
16:	55.367	1.6580	55.334	1.6589	7	36	1.9	586	3.1	0.293
17:	59.973	1.5412	59.988	1.5409	5	128	6.9	1761	9.4	0.248
18:	62.394	1.4871	62.390	1.4872	6	29	1.6	386	2.1	0.240
19:	64.018	1.4533	64.029	1.4530	6	26	1.4	278	1.5	0.192
20:	65.757	1.4190	65.759	1.4189	5	18	1.0	98	0.5	0.098
21:	67.702	1.3829	67.746	1.3821	5	69	3.7	902	4.8	0.235
22:	68.121	1.3754	68.148	1.3749	5	110	5.9	3234	17.2	0.529

* Intensity values are based on counts per second.

NOPI2741.MDI> 2/2/94 - NOPI-274-XRD1

40 Hits Sorted on Figure-Of-Merit

	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
() Quartz, syn - SiO ₂	+	33-1161	0.3	0.00	95	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	2.7	0.06	50		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>() Moganite [NR] - SiO ₂		38- 360	6.6	-0.06	78		I ()	8.53	10.76	4.93	226	12	2.645
4>() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	6.9	-0.12	50		P21/m (11)	8.92	6.63	5.15	305	2	3.050
5>() Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	7.5	0.06	63		P21/* (11)	8.98	6.73	5.15	311	2	2.977
6>() Berlinite, syn - AlPO ₄	+	10- 423	9.1	0.12	48		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
7>() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	9.2	-0.06	63		I2/m (12)	12.15	8.01	5.08	247	4	2.687
8>() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	10.7	0.06	50		A2/a (15)	20.16	9.00	5.19	469	4	2.790
9>() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	10.8	0.06	50		P-62c (190)	8.56	8.56	10.76	683	2	2.546
10>() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	12.9	0.00	50		I4/m (87)	10.53	10.53	3.03	168	8	3.510
11>() Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	14.2	0.06	64		I2/m (12)	12.43	5.70	7.08	250	4	6.999
12>() Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	15.5	0.12	35		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
13>() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	16.9	0.12	64		P21/n (14)	9.10	10.05	8.02	672	4	3.710
14>() Giniite - FeFe ₄ (PO ₄) ₄ (OH) ₂ ·2H ₂ O		33- 669	18.5	0.06	63		C*** (65)	10.36	26.58	5.16	711	4	3.405
15>() Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH)	+	10- 446	18.7	-0.06	5		Aa (9)	14.42	8.95	5.15	330	4	2.599
16>() Montmorillonite-17A - Ca _{0.2} Al ₂ Si		19- 150	19.3	0.12	2		P ()	5.18	5.18	17.58	409	1	1.936
17>() Sanidine, disordered - K(Si ₃ Al) ₃ O	+	25- 618	19.4	0.00	35		I2/m (12)	8.45	13.03	7.18	362	4	2.556
18>() Lanarkite, syn - Pb ₂ (SO ₄) ₂	+	33-1486	21.1	0.06	64		I2/m (12)	12.42	5.70	7.07	249	4	7.019
19>() Dorfmanite, syn - Na ₂ HPO ₄ ·2H ₂ O		10- 190	21.4	0.06	63		P ()	10.34	16.82	6.60	1148	8	2.060
20>() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	22.6	0.00	10								2.590
21>() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	23.3	-0.12	15		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
22>() Orthoclase, bariar - (K,Ba)(Si,A		19- 3	23.5	0.00	35		I2/m (12)	8.50	13.06	7.20	365	4	
23>() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	23.6	0.06	63		P21/n (14)	7.40	7.49	7.31	356	2	3.652
24>() Rostite - Al(SO ₄)(OH) ₂ ·5H ₂ O	+	41-1382	24.0	0.00	18		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
25>() Sainfeldite - Ca ₅ H ₂ (AsO ₄) ₄ ·4H ₂ O		16- 615	25.2	0.12	48		C2/c (15)	18.64	9.81	10.12	918	8	2.990
26>() Illite-montmorillonite - K _{0.5} Al ₂		35- 652	26.8	0.00	35			8.90	13.00	5.20	602		
27>() Macaulayite - Fe ₂₄ Si ₄ O ₄₃ (OH) ₂		42- 596	27.7	-0.06	4		A ()	36.34	8.73	5.04	798	2	4.523
28>() Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	28.8	0.06	63		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
29>() Kinoshitalite-IT1M\RG - BaMg ₃ Al	+	29- 180	29.4	0.12	48		A2/m (12)	10.26	9.25	5.34	250	2	3.421
30>() Chamosite-IT1M#I#b\RG - (Fe,A		21-1227	30.0	-0.12	3		A2/m (12)	14.16	9.29	5.37	350	2	3.117
31>() Alamosite - PbSiO ₃		29- 782	30.4	0.06	50		Pn (7)	12.25	7.06	11.24	893	12	6.319
32>() Kaolinite-IT1Md\RG - Al ₂ Si ₂ O ₅ (O		29-1488	30.5	-0.12	4		A*/* (12)	7.39	8.93	5.16	165	2	2.601
33>() Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH	+	14- 164	30.5	0.06	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
34>() Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	31.6	0.00	48		I2/m (12)	8.59	13.05	7.20	368	4	3.390
35>() Corrensite - Mg ₉ (Si,Al) ₈ O ₂₀ (OH) ₁		42- 620	32.2	0.12	3		P ()	5.34	5.34	32.06	791	1	2.031
36>() Clinocllore-IT1M#I#a\RG, ferroa		16- 362	33.3	-0.12	4		A2/m (12)	14.20	9.29	5.32	348	2	
37>() Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH	+	16- 606	34.6	-0.06	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
38>() Tridymite-IT20H\RG, syn - SiO ₂		14- 260	35.1	0.12	15		P ()	9.92	9.92	81.50	6946	160	2.298
39>() Clinocllore-IT1M#I#b\RG, ferr		24- 506	36.0	-0.06	4		P1 (1)	9.27	14.36	5.34	705	2	
40>() Montmorillonite-21A - Na _{0.3} (Al,M		29-1499	36.0	0.00	2		P ()	5.21	5.21	22.00	517	1	

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

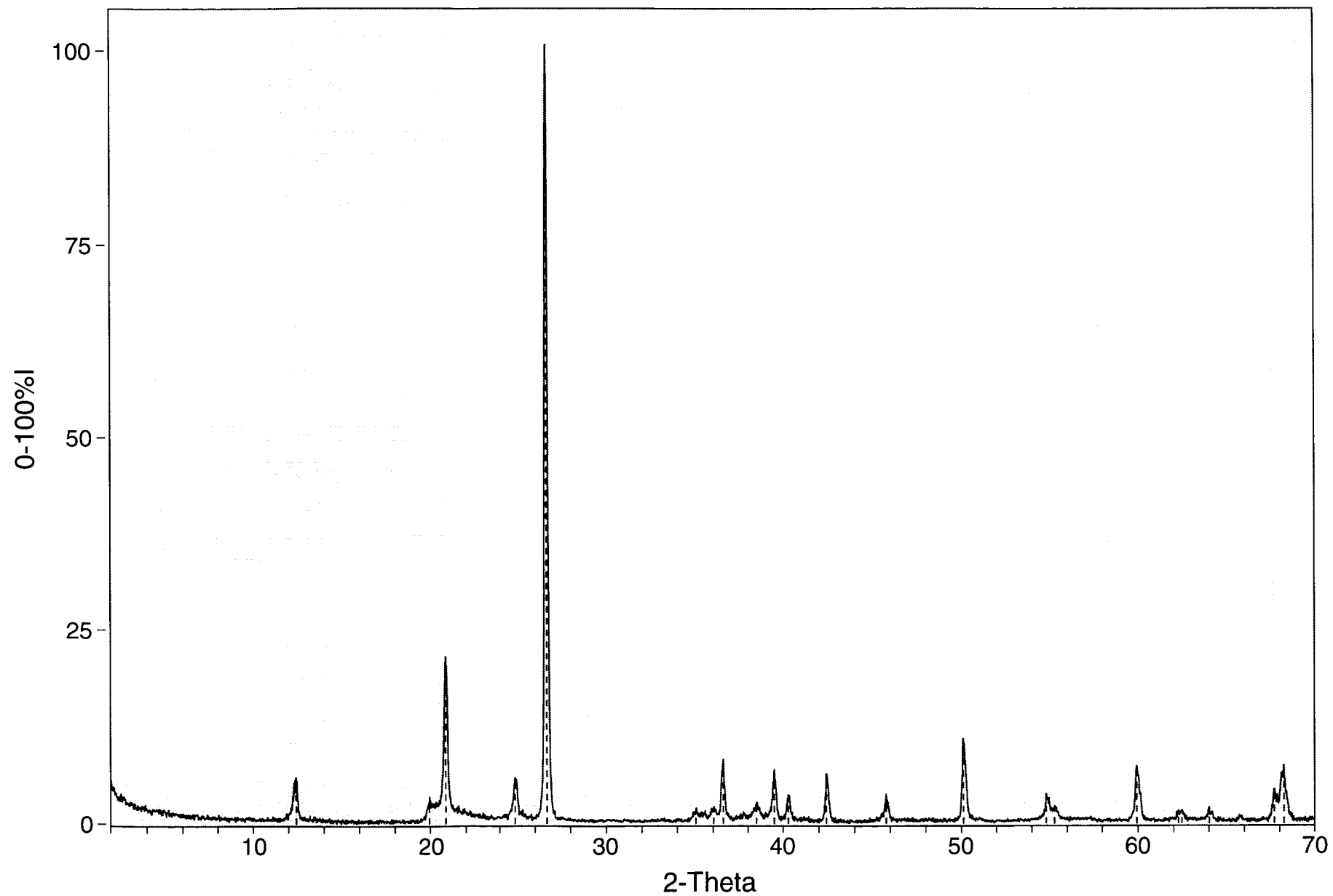
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/2/94 - NOPI-275-XRD1

File: NOPI2751.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

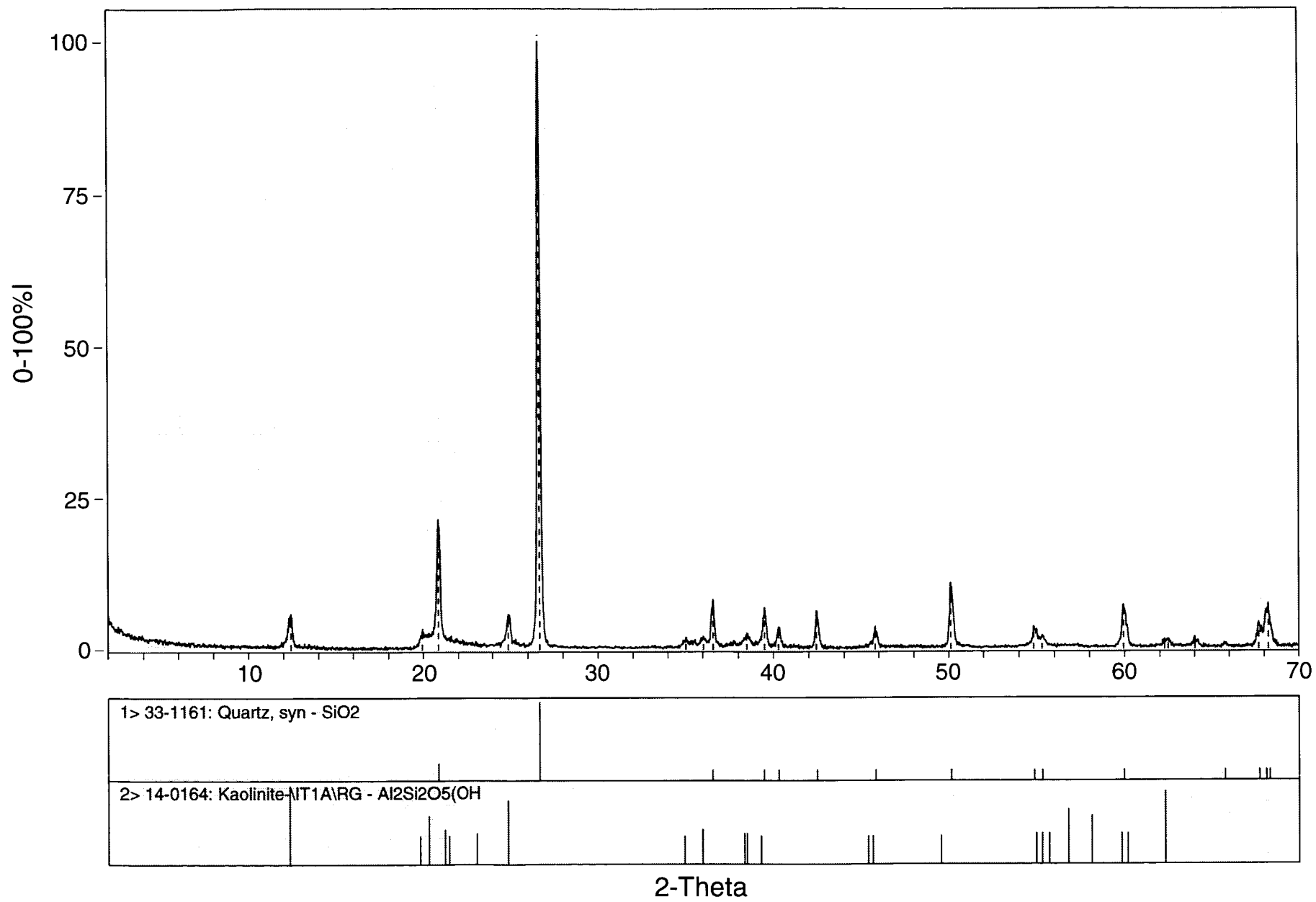


ID: 2/2/94 - NOPI-275-XRD1

File: NOPI2751.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2751.MDI> 2/2/94 - NOPI-275-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           Filter length(pts) = 25
Scan Range = 2 - 70                Noise level(sigmas) = 3.0
Step Size  = .02                   Intensity cutoff(%) = .5-100
Count Time = 1 sec.                2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.420	7.1210	12.379	7.1443	7	107	5.5	1537	7.1	0.259
2:	19.957	4.4455	19.990	4.4381	11	57	2.9	949	4.4	0.300
3:	20.856	4.2557	20.860	4.2550	11	407	21.1	6822	31.6	0.302
4:	24.874	3.5767	24.882	3.5756	12	110	5.7	1595	7.4	0.261
5:	26.670	3.3398	26.654	3.3417	11	1933	100.0	21574	100.0	0.201
6:	35.045	2.5585	35.055	2.5578	8	32	1.7	456	2.1	0.256
7:	36.044	2.4898	36.041	2.4900	9	35	1.8	562	2.6	0.289
8:	36.582	2.4544	36.564	2.4555	10	150	7.8	1671	7.7	0.201
9:	38.483	2.3374	38.481	2.3375	11	44	2.3	686	3.2	0.281
10:	39.482	2.2806	39.477	2.2808	11	123	6.4	1474	6.8	0.216
11:	40.282	2.2371	40.295	2.2364	10	62	3.2	671	3.1	0.195
12:	42.422	2.1291	42.452	2.1276	5	118	6.1	1268	5.9	0.193
13:	45.778	1.9805	45.784	1.9802	5	70	3.6	882	4.1	0.227
14:	50.116	1.8187	50.154	1.8174	5	212	11.0	2598	12.0	0.221
15:	54.833	1.6729	54.883	1.6715	7	68	3.5	1200	5.6	0.318
16:	55.310	1.6596	55.274	1.6606	8	37	1.9	832	3.9	0.405
17:	59.928	1.5423	59.964	1.5414	5	138	7.1	2216	10.3	0.289
18:	62.285	1.4894	62.319	1.4887	6	31	1.6	404	1.9	0.235
19:	62.484	1.4852	62.449	1.4859	6	28	1.4	428	2.0	0.275
20:	64.023	1.4531	64.033	1.4529	6	34	1.8	387	1.8	0.205
21:	67.702	1.3829	67.755	1.3819	6	79	4.1	1392	6.5	0.317
22:	68.239	1.3733	68.212	1.3737	6	137	7.1	3050	14.1	0.401

* Intensity values are based on counts per second.

NOPI2751.MDI> 2/2/94 - NOPI-275-XRD1

40 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>()	Quartz, syn - SiO2	+	33-1161	0.4	0.00	99	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649	
2>()	Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.4	0.06	74		P21/c (14)	10.02	10.61	9.84	1046	4	2.224	
3>()	Moganite [NR] - SiO2		38- 360	3.4	0.00	60		I ()	8.53	10.76	4.93	226	12	2.645	
4>()	Augelite - Al2(PO4)(OH)3	+	34- 151	6.3	-0.06	55		I2/m (12)	12.15	8.01	5.08	247	4	2.687	
5>()	Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	6.9	0.12	92		P21/* (11)	8.98	6.73	5.15	311	2	2.977	
6>()	Bonshtedtite - Na3Fe(PO4)(CO3)	+	35- 678	7.2	-0.12	74		P21/m (11)	8.92	6.63	5.15	305	2	3.050	
7>()	Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	8.8	-0.12	20		P21/m (11)	7.35	25.23	6.10	1126	4	2.065	
8>()	Wollastonite-IT1A\RG - CaSiO3		27-1064	10.5	-0.12	46		P-1 (2)	7.33	7.93	7.07	399	6	2.903	
9>()	Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	10.9	0.00	74		I4/m (87)	10.53	10.53	3.03	168	8	3.510	
10>()	Microcline, ordered - KAlSi3O8	+	19- 926	11.1	-0.12	20		P-1 (2)	7.62	7.92	7.22	361	2	2.561	
11>()	Unnamed mineral, syn [NR] - Fe3(	+	37- 481	12.2	0.00	69		P21/n (14)	9.10	10.05	8.02	672	4	3.710	
12>()	Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	12.5	0.06	74		P-62c (190)	8.56	8.56	10.76	683	2	2.546	
13>()	Khademite - Al(SO4)(OH)5H2O	+	26-1011	12.6	-0.06	20		Pcab (61)	11.18	13.06	10.89	1589	8	1.924	
14>()	Rostite - Al(SO4)(OH)5H2O	+	41-1382	12.6	0.06	21		Pcab (61)	11.19	13.06	10.89	1591	8	1.921	
15>()	Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	13.4	0.06	74		A2/a (15)	20.16	9.00	5.19	469	4	2.790	
16>()	Lanarkite, syn - Pb2OSO4	+	37- 516	15.1	0.12	46		I2/m (12)	12.43	5.70	7.08	250	4	6.999	
17>()	Lanarkite, syn - Pb2(SO4)O	+	33-1486	15.8	0.12	46		I2/m (12)	12.42	5.70	7.07	249	4	7.019	
18>()	Kaolinite-IT1A\RG - Al2Si2O5(OH	+	14- 164	15.9	0.12	5		P-1 (2)	7.41	8.96	5.16	330	2	2.595	
19>()	Giniite - FeFe4(PO4)4(OH)2·2H2O		33- 669	16.1	0.06	55		C*** (65)	10.36	26.58	5.16	711	4	3.405	
20>()	Tridymite-IT20H\RG, syn - SiO2		14- 260	16.8	0.12	20		P ()	9.92	9.92	81.50	6946	160	2.298	
21>()	Barbosallite - FeFe2(PO4)2(OH)2	+	33- 668	17.6	0.06	55		P21/n (14)	7.40	7.49	7.31	356	2	3.652	
22>()	Gismondine - CaAl2Si2O8·4H2O	+	39-1373	18.1	0.12	20		P21/c (14)	10.02	10.64	9.84	1047	4	2.221	
23>()	Orthoclase, barian - (K,Ba)(Si,A		19- 3	18.8	0.00	60		I2/m (12)	8.50	13.06	7.20	365	4		
24>()	Sanidine, disordered - K(Si3Al)O	+	25- 618	19.1	0.00	60		I2/m (12)	8.45	13.03	7.18	362	4	2.556	
25>()	Lipscombite, manganoan - (Fe,Mn)	+	14- 310	19.7	-0.12	46		P41212 (92)	7.40	7.40	12.81	701	4	3.660	
26>()	Caminite - Mg3(SO4)2(OH)2	+	39- 359	21.1	0.12	60		I41/amd (141)	5.25	5.25	12.99	179	2	2.775	
27>()	Foggite - CaAl(PO4)(OH)2·H2O		29- 282	21.5	-0.06	21		A2122 (20)	9.27	21.32	5.19	513	8	2.772	
28>()	Dorfmanite, syn - Na2HPO4·2H2O		10- 190	23.1	0.06	55		P ()	10.34	16.82	6.60	1148	8	2.060	
29>()	Dumontite - Pb2(UO2)3(PO4)2(OH)4		12- 158	23.4	0.12	20		P21/m (11)	8.16	16.73	7.02	901	2	5.666	
30>()	Clinochlore-IT1M#I#I#b\RG - (Mg		12- 242	23.6	-0.12	4		A2/m (12)	14.29	9.21	5.32	347	2		
31>()	Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	24.9	-0.06	5		A*/* (12)	7.39	8.93	5.16	165	2	2.601	
32>()	Alamosite - PbSiO3		29- 782	27.4	0.06	74		Pn (7)	12.25	7.06	11.24	893	12	6.319	
33>()	Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	27.6	0.06	55		Pncn (52)	13.43	26.88	5.28	1906	4	2.257	
>()	Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10- 446	29.1	-0.12	3		Aa (9)	14.42	8.95	5.15	330	4	2.599	
>()	Orthochrysotile-IT2O#c#1\RG - M	+	22-1162	30.0	0.00	5		Bm21b (36)	9.25	14.20	5.34	351	4	2.624	
36>()	Macaulayite - Fe24Si4O43(OH)2		42- 596	30.5	-0.06	4		A ()	36.34	8.73	5.04	798	2	4.523	
37>()	Halloysite-7A - Al2Si2O5(OH)4		9- 453	30.5	-0.12	3		P ()	5.12	5.12	7.30	166	1	2.582	
38>()	Halloysite-7A - Al2Si2O5(OH)4		29-1487	31.2	-0.06	3		P ()	5.13	5.13	7.16	163	1	2.624	
39>()	Ramsdellite - MnO2	+	42-1316	31.4	-0.12	16	3.0	Pbnm (62)	4.70	9.53	2.86	128	4	4.501	
40>()	Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	32.2	0.00	10									2.590

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

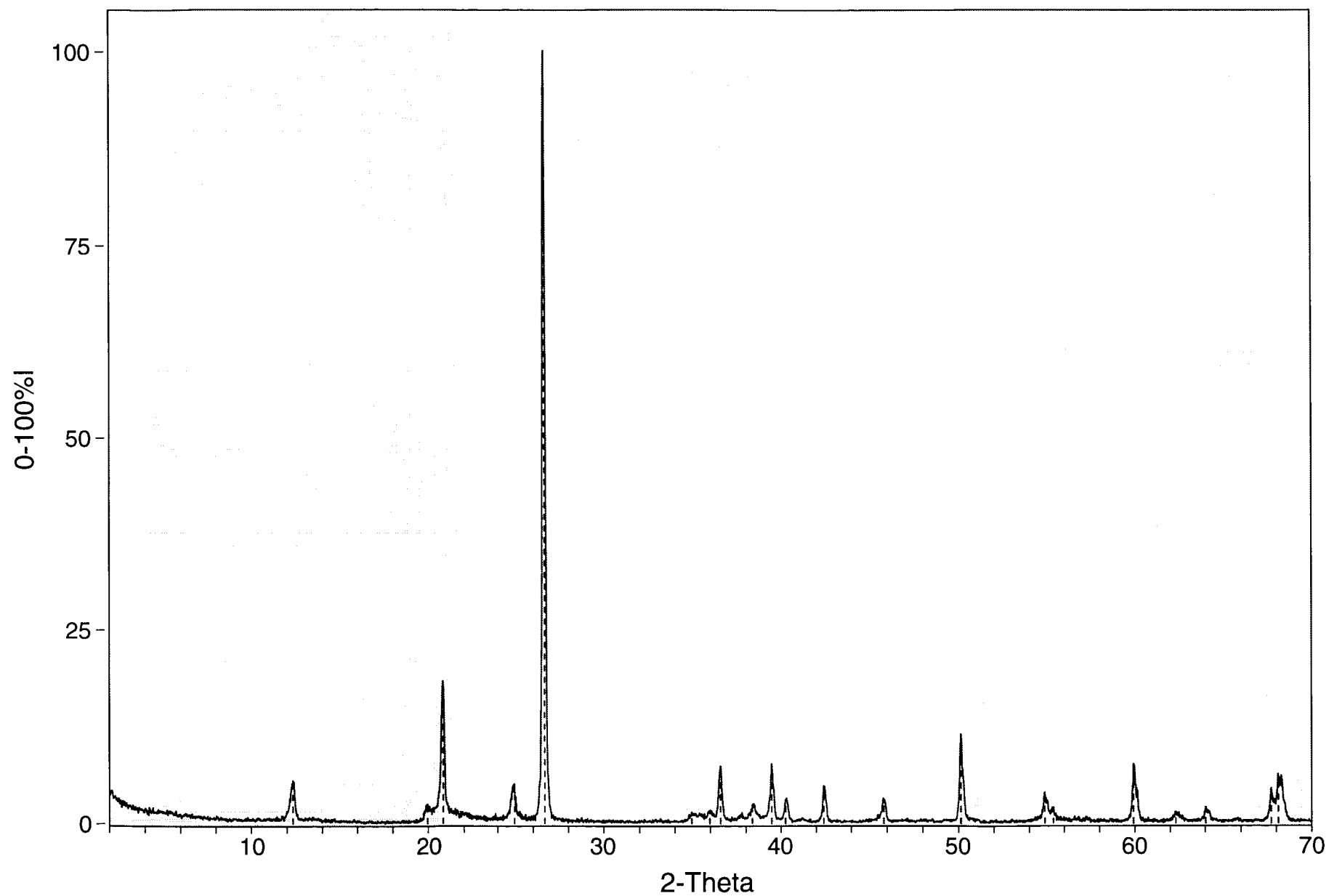
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/2/94 - NOPI-276-XRD1

File: NOPI2761.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

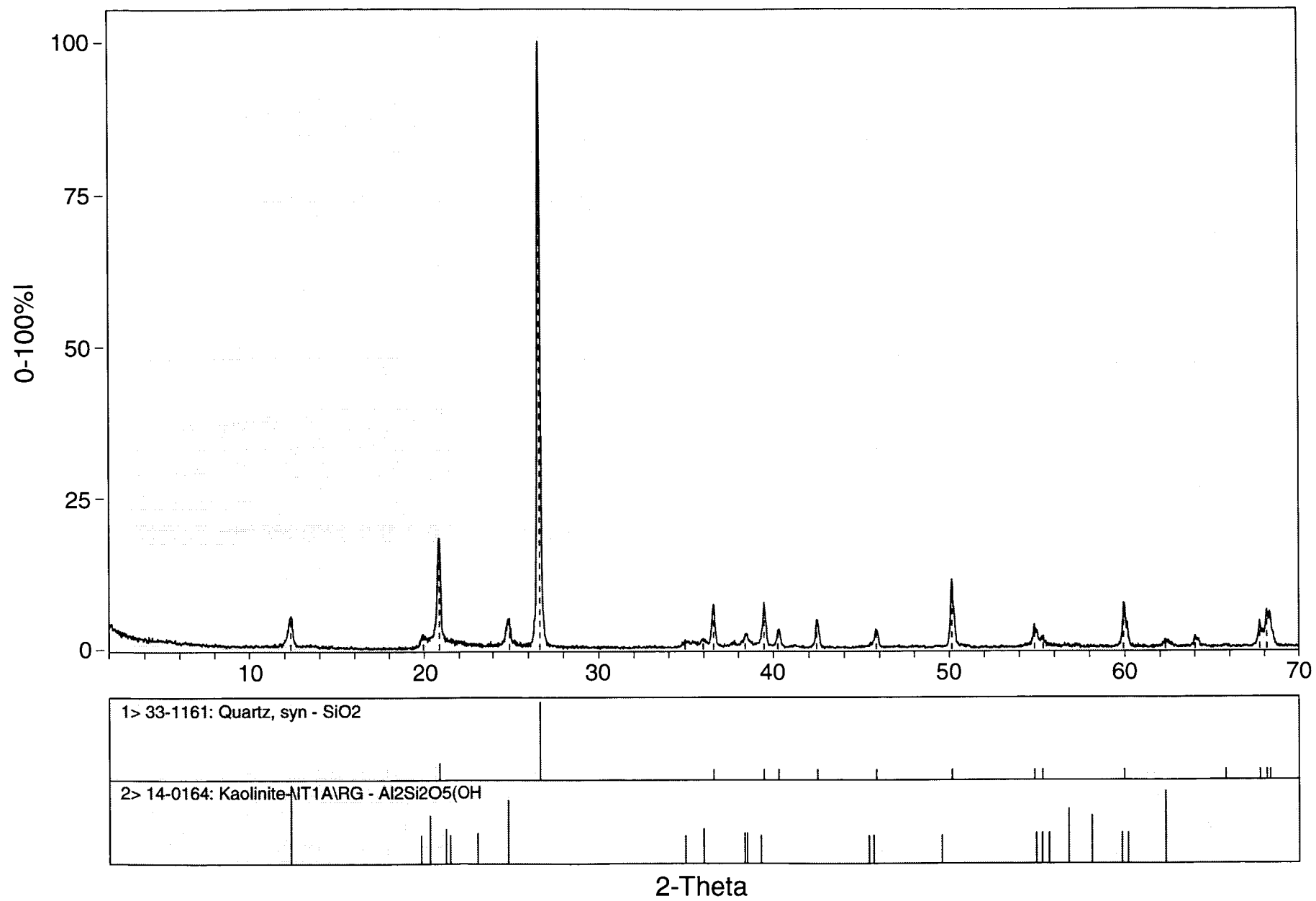


ID: 2/2/94 - NOPI-276-XRD1

File: NOPI2761.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Thu Feb 03 1994 @9:31am

File: NOPI2761.MDI> 2/2/94 - NOPI-276-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts)  = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 3.0
Step Size  = .02                   || Intensity cutoff(%) = .5-100
Count Time = 1 sec.                || 2-Theta Zero (deg)  = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.334	7.1705	12.315	7.1814	8	113	5.3	1851	8.1	0.295
2:	19.958	4.4453	19.978	4.4408	11	44	2.0	845	3.7	0.346
3:	20.857	4.2555	20.835	4.2600	11	387	18.0	6265	27.5	0.291
4:	24.938	3.5677	24.888	3.5748	13	98	4.6	1383	6.1	0.254
5:	26.641	3.3433	26.625	3.3453	11	2147	100.0	22767	100.0	0.191
6:	34.947	2.5654	34.974	2.5635	7	27	1.3	423	1.9	0.282
7:	35.967	2.4950	35.973	2.4945	9	35	1.6	520	2.3	0.267
8:	36.567	2.4554	36.553	2.4563	10	157	7.3	1698	7.5	0.195
9:	38.371	2.3440	38.401	2.3422	11	48	2.2	698	3.1	0.262
10:	39.470	2.2812	39.466	2.2814	10	165	7.7	1846	8.1	0.201
11:	40.252	2.2387	40.278	2.2373	10	65	3.0	645	2.8	0.179
12:	42.433	2.1285	42.459	2.1273	4	113	5.3	1264	5.6	0.201
13:	45.813	1.9790	45.803	1.9795	4	72	3.4	931	4.1	0.233
14:	50.137	1.8180	50.166	1.8170	4	247	11.5	2992	13.1	0.218
15:	54.879	1.6716	54.911	1.6707	6	82	3.8	1746	7.7	0.383
16:	55.376	1.6578	55.333	1.6590	7	41	1.9	621	2.7	0.273
17:	59.923	1.5424	59.974	1.5412	5	162	7.5	2211	9.7	0.246
18:	62.322	1.4887	62.344	1.4882	6	28	1.3	416	1.8	0.267
19:	64.024	1.4531	64.052	1.4526	6	43	2.0	494	2.2	0.207
20:	67.726	1.3824	67.782	1.3814	6	98	4.6	1565	6.9	0.287
21:	68.127	1.3753	68.158	1.3747	6	136	6.3	3798	16.7	0.503

* Intensity values are based on counts per second.

NOPI2761.MDI> 2/2/94 - NOPI-276-XRD1

40 Hits Sorted on Figure-Of-Merit

	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>() Quartz, syn - SiO2	+	33-1161	0.3	0.00	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>() Gismondine - CaAl2Si2O8·4H2O	+	20- 452	2.9	0.06	51		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>() Moganite [NR] - SiO2		38- 360	7.6	0.00	36		I ()	8.53	10.76	4.93	226	12	2.645
4>() Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	8.5	0.06	65		P21/* (11)	8.98	6.73	5.15	311	2	2.977
5>() Bonshtedtite - Na3Fe(PO4)(CO3)	+	35- 678	8.7	-12	51		P21/m (11)	8.92	6.63	5.15	305	2	3.050
6>() Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	9.4	0.06	51		P-62c (190)	8.56	8.56	10.76	683	2	2.546
7>() Augelite - Al2(PO4)(OH)3	+	34- 151	9.6	-06	65		I2/m (12)	12.15	8.01	5.08	247	4	2.687
8>() Berlinite, syn - AlPO4	+	10- 423	11.2	0.12	51		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
9>() Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26- 911	12.6	0.06	51		A2/a (15)	20.16	9.00	5.19	469	4	2.790
10>() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	13.3	0.00	51		I4/m (87)	10.53	10.53	3.03	168	8	3.510
11>() Unnamed mineral, syn [NR] - Fe3(OH)	+	37- 481	16.1	0.12	66		P21/n (14)	9.10	10.05	8.02	672	4	3.710
12>() Orthoclase, barian - (K,Ba)(Si,A		19- 3	16.8	0.00	36		I2/m (12)	8.50	13.06	7.20	365	4	
13>() Caminite - Mg3(SO4)2(OH)2	+	39- 359	18.9	0.12	36		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
14>() Kinoshitalite-IT1M\RG - BaMg3Al	+	29- 180	19.4	0.12	51		A2/m (12)	10.26	9.25	5.34	250	2	3.421
15>() Lanarkite, syn - Pb2OSO4	+	37- 516	20.5	0.06	66		I2/m (12)	12.43	5.70	7.08	250	4	6.999
16>() Lanarkite, syn - Pb2(SO4)O	+	33-1486	21.6	0.06	66		I2/m (12)	12.42	5.70	7.07	249	4	7.019
17>() Barbosalite - FeFe2(PO4)2(OH)2	+	33- 668	21.7	0.06	65		P21/n (14)	7.40	7.49	7.31	356	2	3.652
18>() Giniite - FeFe4(PO4)4(OH)2·2H2O		33- 669	22.2	0.06	65		C*** (65)	10.36	26.58	5.16	711	4	3.405
19>() Sanidine, disordered - K(Si3Al)O	+	25- 618	24.7	0.00	36		I2/m (12)	8.45	13.03	7.18	362	4	2.556
20>() Sainfeldite - Ca5H2(AsO4)4H2O		16- 615	24.8	0.12	51		C2/c (15)	18.64	9.81	10.12	918	8	2.990
21>() Kaolinite-IT1A\RG - Al2Si2O5(OH)	+	14- 164	25.2	0.12	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
22>() Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	25.6	0.00	10								2.590
23>() Dorfmanite, syn - Na2HPO4·2H2O		10- 190	30.1	0.06	65		P ()	10.34	16.82	6.60	1148	8	2.060
24>() Sepiolite - Mg4Si6O15(OH)2·6H2O	+	26-1226	30.3	0.06	65		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
25>() Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	30.5	0.00	4		A*/* (12)	7.39	8.93	5.16	165	2	2.601
26>() Clinocllore-IT1M#I#b\RG - (Mg		12- 242	30.5	-12	3		A2/m (12)	14.29	9.21	5.32	347	2	
27>() Gismondine - CaAl2Si2O8·4H2O	+	39-1373	30.5	0.00	14		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
28>() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	31.9	0.00	5		Aa (9)	14.61	5.15	8.91	329	4	2.602
29>() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	33.1	-06	12		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
30>() Ramsdellite - MnO2	+	42-1316	33.9	-12	10	3.0	Pbnm (62)	4.70	9.53	2.86	128	4	4.501
31>() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	34.6	0.00	4		P31m (157)	5.31	5.31	42.62	1040	6	2.600
32>() Alamosite - PbSiO3		29- 782	34.8	0.06	51		Pn (7)	12.25	7.06	11.24	893	12	6.319
33>() Chamosite-IT1M#I#b\RG - (Fe,A		21-1227	35.6	-06	2		A2/m (12)	14.16	9.29	5.37	350	2	3.117
>() Magnesium-zippeite - Mg2(UO2)6(S		29- 876	35.6	0.06	5								3.300
>() Fourmarierite - PbU4O13·4H2O	+	13- 116	35.6	0.12	5		B**b (63)	14.39	16.47	14.00	1659	8	5.763
36>() Cronstedtite-IT1M\RG - Fe3(Si,F	+	17- 470	37.3	-12	5		Am (8)	7.32	9.51	5.49	185	2	3.340
37>() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	34- 170	37.3	0.12	4	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
38>() Khademite - Al(SO4)(OH)·5H2O	+	26-1011	37.6	-12	14		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
39>() Celsian, syn - BaAl2Si2O8	+	38-1450	37.8	0.00	51		I2/m (12)	8.59	13.05	7.20	368	4	3.390
40>() Aluminum [NR] - Al	+	4- 787	38.4	0.00	2	3.6	Fm3m (225)	4.05	4.05	4.05	17	4	2.699

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

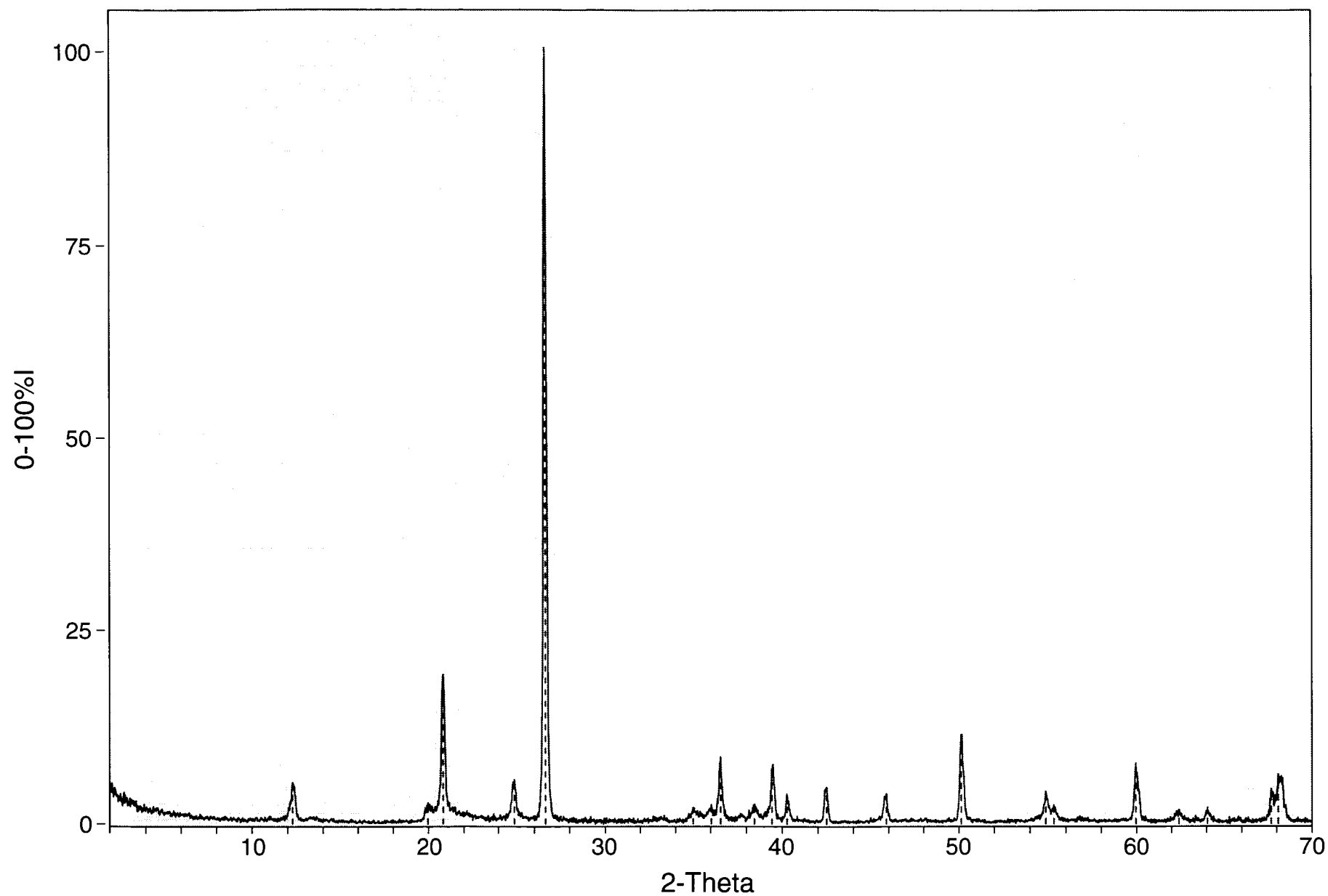
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/10/94 - NOPI-277-XRD1

File: NOPI2771.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

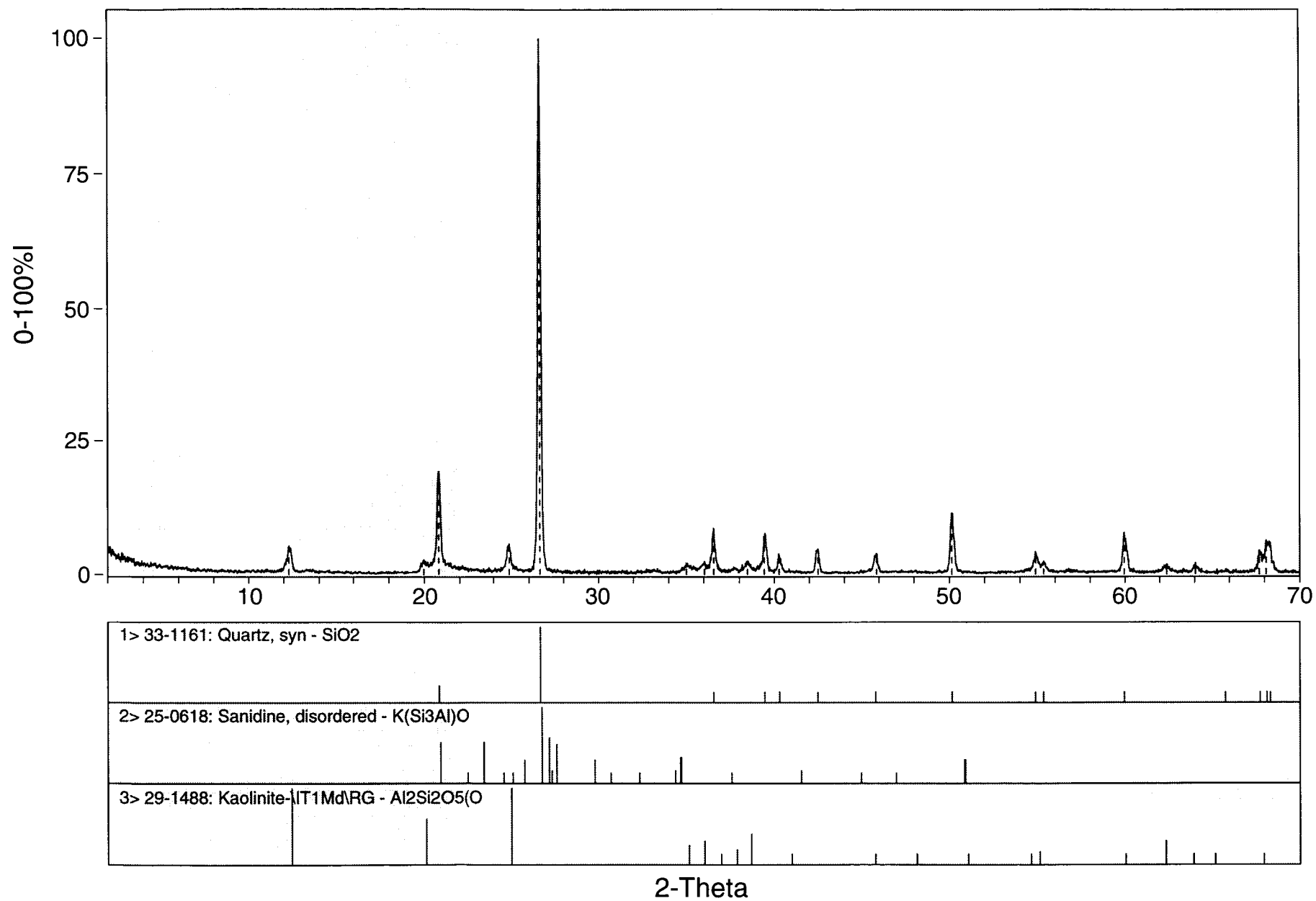


ID: 2/10/94 - NOPI-277-XRD1

File: NOPI2771.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2771.MDI> 2/10/94 - NOPI-277-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.271	7.2072	12.287	7.1978	8	88	5.2	1355	7.3	0.277
2:	19.974	4.4418	19.996	4.4367	10	39	2.3	648	3.5	0.299
3:	20.834	4.2602	20.832	4.2605	9	327	19.3	5587	30.0	0.308
4:	24.875	3.5765	24.861	3.5785	10	88	5.2	1333	7.2	0.273
5:	26.637	3.3438	26.628	3.3449	9	1694	100.0	18636	100.0	0.198
6:	35.004	2.5613	35.029	2.5596	7	31	1.8	531	2.8	0.308
7:	36.041	2.4900	36.042	2.4899	7	36	2.1	1308	7.0	0.654
8:	36.563	2.4557	36.548	2.4566	8	144	8.5	1691	9.1	0.211
9:	38.464	2.3385	38.468	2.3383	9	35	2.1	591	3.2	0.304
10:	39.428	2.2836	39.450	2.2823	8	123	7.3	1613	8.7	0.236
11:	40.267	2.2379	40.282	2.2371	9	58	3.4	527	2.8	0.164
12:	42.485	2.1261	42.459	2.1273	4	79	4.7	941	5.0	0.214
13:	45.866	1.9769	45.833	1.9782	5	72	4.3	761	4.1	0.190
14:	50.133	1.8182	50.160	1.8173	4	201	11.9	2458	13.2	0.220
15:	54.875	1.6717	54.902	1.6710	6	68	4.0	1511	8.1	0.400
16:	55.334	1.6589	55.299	1.6599	6	40	2.4	649	3.5	0.292
17:	59.958	1.5416	59.987	1.5409	6	130	7.7	1728	9.3	0.239
18:	62.417	1.4866	62.400	1.4870	5	27	1.6	469	2.5	0.313
19:	64.039	1.4528	64.049	1.4526	5	31	1.8	341	1.8	0.198
20:	67.704	1.3828	67.764	1.3817	4	73	4.3	2088	11.2	0.515
21:	68.103	1.3757	68.133	1.3751	5	104	6.1	3079	16.5	0.533

* Intensity values are based on counts per second.

NOPI2771.MDI> 2/10/94 - NOPI-277-XRD1

40 Hits Sorted on Figure-Of-Merit			QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO2	+	33-1161	0.4	0.00	95	3.6	P3221 (154)		4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.2	0.06	56		P21/c (14)		10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO2		38- 360	4.1	0.00	43		I ()		8.53	10.76	4.93	226	12	2.645
4>	() Berlinite, syn - AlPO4	+	10- 423	7.4	0.12	57		P31,212 (151)		4.94	4.94	10.97	232	3	2.618
5>	() Augelite - Al2(PO4)(OH)3	+	34- 151	8.5	-0.06	69		I2/m (12)		12.15	8.01	5.08	247	4	2.687
6>	() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	12.9	0.00	56		I4/m (87)		10.53	10.53	3.03	168	8	3.510
7>	() Despujolsite - Ca3Mn(SO4)2(OH)6		20- 226	12.9	0.06	56		P-62c (190)		8.56	8.56	10.76	683	2	2.546
8>	() Sanidine, disordered - K(Si3Al)O	+	25- 618	17.3	0.00	43		I2/m (12)		8.45	13.03	7.18	362	4	2.556
9>	() Barbosalite - FeFe2(PO4)2(OH)2	+	33- 668	17.9	0.06	69		P21/n (14)		7.40	7.49	7.31	356	2	3.652
10>	() Kinoshitalite-IT1M\RG - BaMg3Al	+	29- 180	20.1	0.12	57		A2/m (12)		10.26	9.25	5.34	250	2	3.421
11>	() Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	21.2	0.06	11									2.590
12>	() Dickite-IT2M#1\RG - Al2Si2O5(OH	+	10- 446	21.2	-0.12	5		Aa (9)		14.42	8.95	5.15	330	4	2.599
13>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	16- 606	21.6	-0.06	5		Aa (9)		14.61	5.15	8.91	329	4	2.602
14>	() Halloysite-7A - Al2Si2O5(OH)4		29-1487	26.6	-0.06	2		P ()		5.13	5.13	7.16	163	1	2.624
15>	() Clinocllore-IT1M#I#b\RG - (Mg		12- 242	26.8	-0.12	3		A2/m (12)		14.29	9.21	5.32	347	2	
16>	() Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	26.9	-0.12	15		P21/m (11)		7.35	25.23	6.10	1126	4	2.065
17>	() Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	28.2	-0.12	5		A*/ (12)		7.39	8.93	5.16	165	2	2.601
18>	() Alamosite - PbSiO3		29- 782	29.3	0.06	56		Pn (7)		12.25	7.06	11.24	893	12	6.319
19>	() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	29.4	-0.06	14		Pcab (61)		11.19	13.06	10.89	1591	8	1.921
20>	() Kaolinite-IT1A\RG - Al2Si2O5(OH	+	14- 164	31.0	0.12	3		P-1 (2)		7.41	8.96	5.16	330	2	2.595
21>	() Khademite - Al(SO4)(OH)·5H2O	+	26-1011	31.0	-0.12	16		Pcab (61)		11.18	13.06	10.89	1589	8	1.924
22>	() Moissanite-4\ITH\RG, syn - SiC	+	22-1317	32.2	0.12	2		P63mc (186)		3.07	3.07	10.05	82	2	1.620
23>	() Corrensite - Mg9(Si,Al)8O20(OH)1		42- 620	32.3	0.00	3		P ()		5.34	5.34	32.06	791	1	2.031
24>	() Lizardite-IT1T\RG - Mg3Si2O5(OH		18- 779	32.5	0.12	2		P31m (157)		5.32	5.32	7.32	180	1	2.561
25>	() Chamosite-IT1M#I#b\RG - (Fe,A		21-1227	33.6	-0.12	4		A2/m (12)		14.16	9.29	5.37	350	2	3.117
26>	() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	34.1	0.00	4		P31m (157)		5.31	5.31	42.62	1040	6	2.600
27>	() Clinocllore-IT1M#I#b\RG, ferr		7- 78	34.1	0.00	2		A2/m (12)		14.07	9.19	5.31	340	2	2.960
28>	() Carlosturanite - Mg2Si12O28(OH)		38- 404	34.1	0.00	5		Im (8)		36.01	9.41	7.29	1235	1	1.271
29>	() Lizardite-IT6T\RG - Mg3Si2O5(OH		9- 444	34.9	0.12	3		P31m (157)		5.33	5.33	43.78	1076	6	2.565
30>	() Epsomite, syn - MgSO4·7H2O	+	36- 419	35.1	-0.12	12		P212121 (19)		11.87	11.98	6.85	974	4	1.681
31>	() Paragonite-IT2M#1\RG - NaAl2(Al	+	12- 165	35.6	0.00	3		A2/a (15)		19.42	8.94	5.15	445	4	2.851
32>	() Clinocllore-IT1M#I#a\RG, ferroa		16- 362	37.2	-0.12	5		A2/m (12)		14.20	9.29	5.32	348	2	
33>	() Chamosite-IT1O#I#b\RG - (Fe,Al,		13- 29	37.2	-0.06	2		B*** (65)		9.34	14.17	5.40	357	2	3.000
34>	() Berthierine-IT1H\RG - (Fe,Al)3(		31- 618	37.2	0.06	2		P ()		5.41	5.41	7.11	181	1	
35>	() Montmorillonite-21A - Na0.3(Al,M		29-1499	37.9	0.12	2		P ()		5.21	5.21	22.00	517	1	
36>	() Coalingite - Mg10Fe2CO3(OH)24·2H		26-1217	37.9	-0.12	2		R-3m (166)		3.12	3.12	37.40	105	1	2.262
37>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	34- 170	37.9	0.00	5	1.0	Aa (9)		14.61	5.15	8.91	329	4	2.602
38>	() Cronstedtite-IT1M\RG - Fe3(Si,F	+	17- 470	37.9	0.00	3		Am (8)		7.32	9.51	5.49	185	2	3.340
39>	() Clinocllore-IT1M#I#b\RG, ferroa		16- 351	38.7	-0.12	5		A2/m (12)		14.35	9.29	5.32	352	2	2.920
40>	() Alstonite - BaCa(CO3)2	+	27- 32	39.8	-0.12	4		P1 (1)		17.37	17.38	6.12	1603	12	3.698

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

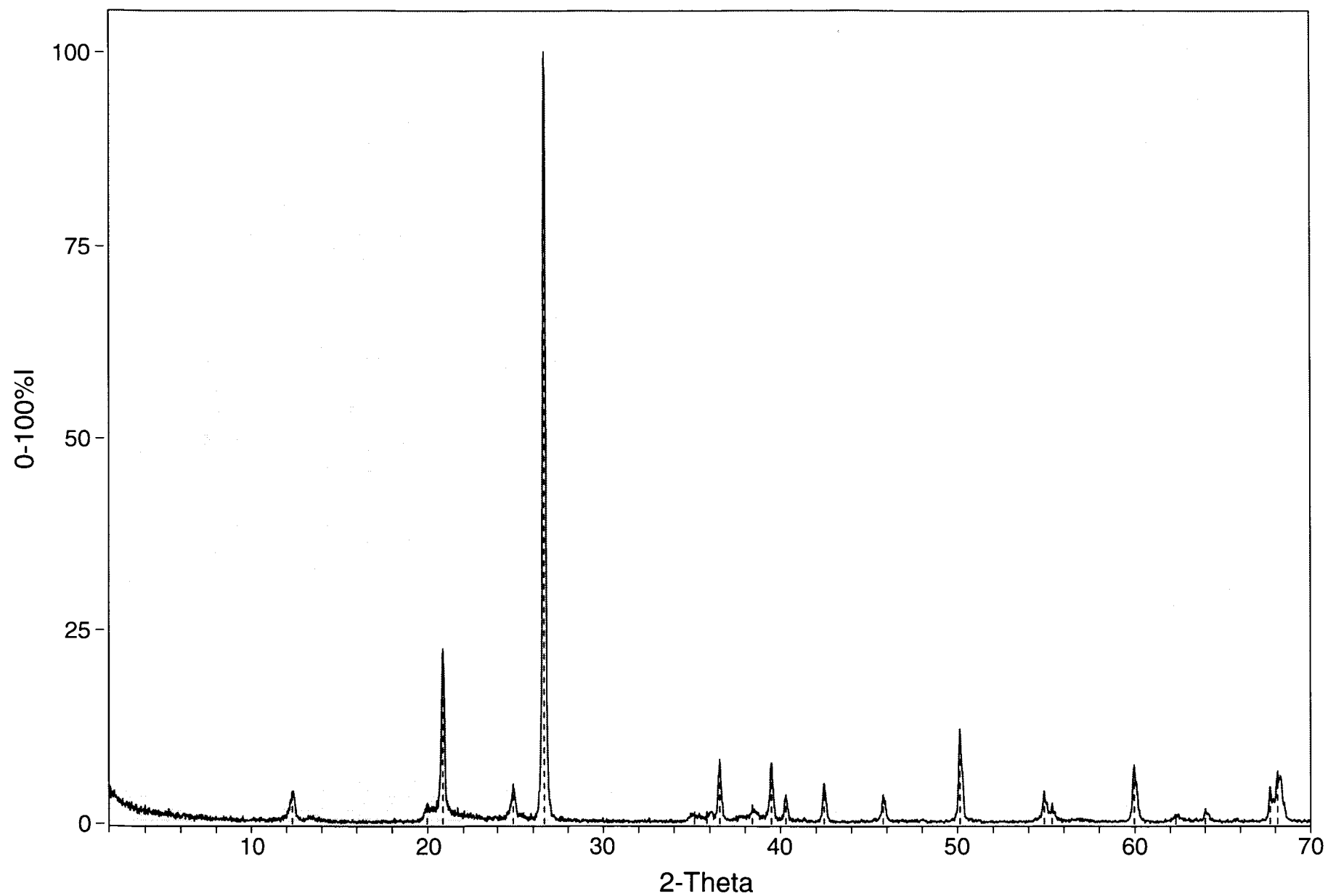
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/10/94 - NOPI-278-XRD1

File: NOPI2781.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

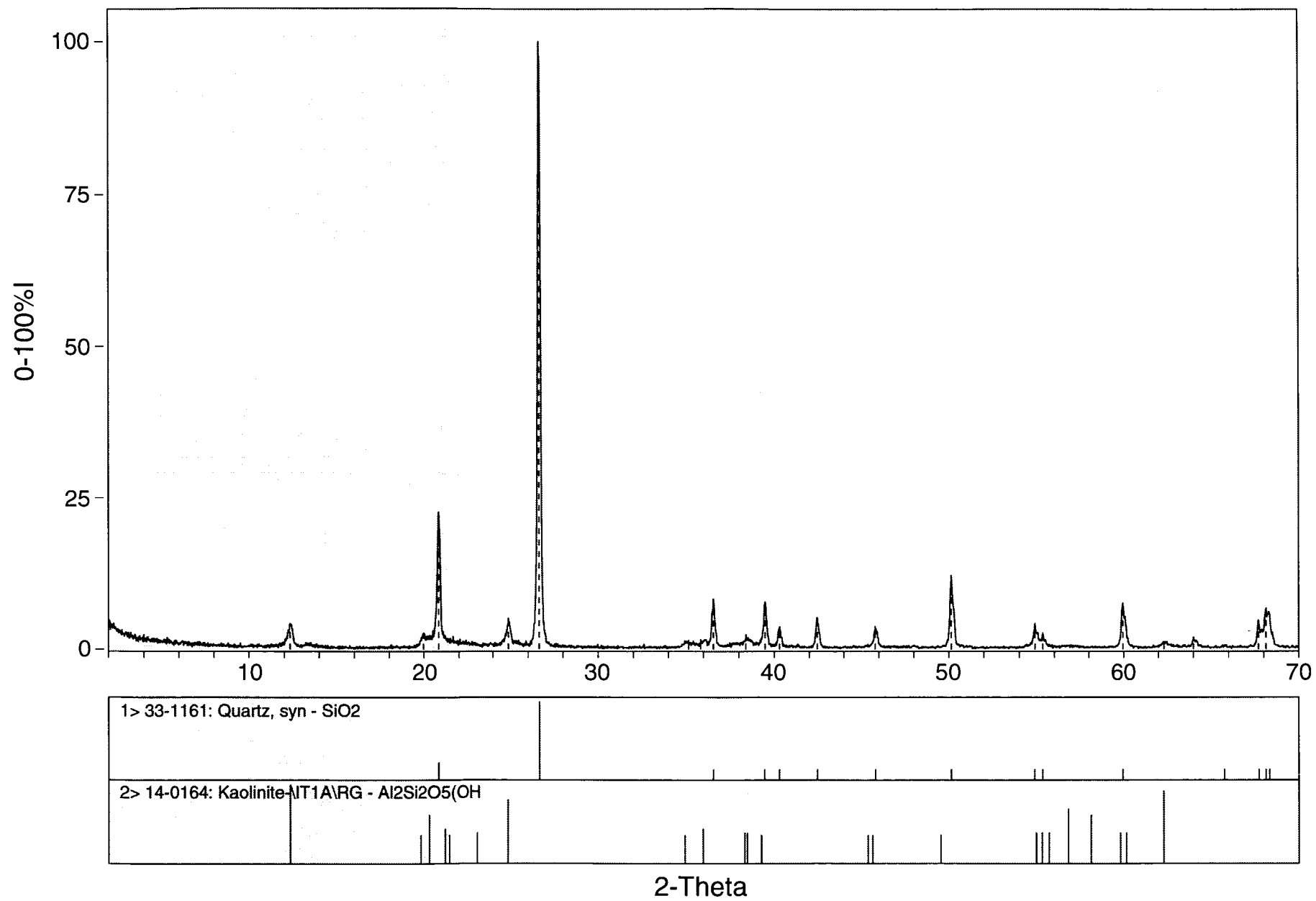


ID: 2/10/94 - NOPI-278-XRD1

File: NOPI2781.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Mon Feb 14 1994 @12:43pm

File: NOPI2781.MDI> 2/10/94 - NOPI-278-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.322	7.1773	12.324	7.1762	8	85	3.9	1580	6.6	0.335
2:	19.979	4.4406	20.008	4.4343	13	47	2.1	840	3.5	0.322
3:	20.841	4.2589	20.846	4.2578	12	488	22.1	7207	30.3	0.266
4:	24.879	3.5759	24.877	3.5762	13	102	4.6	1394	5.9	0.246
5:	26.639	3.3436	26.644	3.3429	13	2206	100.0	23770	100.0	0.194
6:	35.156	2.5506	35.147	2.5513	7	30	1.4	600	2.5	0.360
7:	35.839	2.5036	35.892	2.5000	8	30	1.4	725	3.1	0.435
8:	36.557	2.4560	36.558	2.4560	10	177	8.0	1890	8.0	0.192
9:	38.398	2.3424	38.432	2.3404	11	47	2.1	576	2.4	0.221
10:	39.477	2.2808	39.477	2.2808	11	164	7.4	1887	7.9	0.207
11:	40.297	2.2363	40.301	2.2360	12	73	3.3	712	3.0	0.176
12:	42.457	2.1274	42.470	2.1268	5	112	5.1	1274	5.4	0.205
13:	45.777	1.9805	45.803	1.9795	6	79	3.6	1016	4.3	0.231
14:	50.136	1.8180	50.169	1.8169	4	271	12.3	3469	14.6	0.230
15:	54.895	1.6712	54.922	1.6704	6	97	4.4	1753	7.4	0.325
16:	55.334	1.6589	55.293	1.6601	7	56	2.5	933	3.9	0.300
17:	59.954	1.5417	59.985	1.5409	5	172	7.8	2409	10.1	0.252
18:	62.314	1.4888	62.337	1.4883	6	27	1.2	353	1.5	0.235
19:	64.014	1.4533	64.033	1.4529	6	43	1.9	385	1.6	0.161
20:	67.713	1.3827	67.750	1.3820	6	106	4.8	1243	5.2	0.211
21:	68.133	1.3752	68.160	1.3747	6	151	6.8	4222	17.8	0.503

* Intensity values are based on counts per second.

NOPI2781.MDI> 2/10/94 - NOPI-278-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO2	+	33-1161	0.3	0.00	98	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl2Si2O8·4H2O	+	20- 452	3.5	0.06	69		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Moganite [NR] - SiO2		38- 360	4.8	0.00	53		I ()	8.53	10.76	4.93	226	12	2.645
4>	() Augelite - Al2(PO4)(OH)3	+	34- 151	6.6	-0.06	52		I2/m (12)	12.15	8.01	5.08	247	4	2.687
5>	() Tamarugite - NaAl(SO4)2·6H2O	+	19-1186	8.1	-0.12	20		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
6>	() Khademite - Al(SO4)(OH)·5H2O	+	26-1011	11.9	-0.06	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
7>	() Despujolsite - Ca3Mn(SO4)2(OH)6!		20- 226	11.9	0.06	69		P-62c (190)	8.56	8.56	10.76	683	2	2.546
8>	() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	12.9	0.00	69		I4/m (87)	10.53	10.53	3.03	168	8	3.510
9>	() Rostite - Al(SO4)(OH)·5H2O	+	41-1382	13.0	0.06	22		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
10>	() Barbasalite - FeFe2(PO4)2(OH)2	+	33- 668	18.0	0.06	52		P21/n (14)	7.40	7.49	7.31	356	2	3.652
11>	() Sanidine, disordered - K(Si3Al)O	+	25- 618	20.6	-0.12	90		I2/m (12)	8.45	13.03	7.18	362	4	2.556
12>	() Tungusite - Ca4Fe2Si6O15(OH)6		19- 231	23.0	0.00	11								2.590
13>	() Kaolinite-IT1A\RG - Al2Si2O5(OH)	+	14- 164	26.8	0.06	4		P-1 (2)	7.41	8.96	5.16	330	2	2.595
14>	() Montmorillonite-21A - Na0.3(Al,M		29-1499	28.5	-0.12	2		P ()	5.21	5.21	22.00	517	1	
15>	() Dickite-IT2M#1\RG - Al2Si2O5(OH)	+	10- 446	28.5	-0.06	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
16>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH)	+	16- 606	30.9	0.00	4		Aa (9)	14.61	5.15	8.91	329	4	2.602
17>	() Corrensite - Mg9(Si,Al)8O20(OH)1		42- 620	32.3	-0.12	3		P ()	5.34	5.34	32.06	791	1	2.031
18>	() Kaolinite-IT1Md\RG - Al2Si2O5(O		29-1488	35.6	0.00	3		A** (12)	7.39	8.93	5.16	165	2	2.601
19>	() Chamosite-IT1O#I#b\RG - (Fe,Al,		13- 29	35.6	-0.12	4		B*** (65)	9.34	14.17	5.40	357	2	3.000
20>	() Epsomite, syn - MgSO4·7H2O	+	36- 419	37.0	-0.12	17		P212121 (19)	11.87	11.98	6.85	974	4	1.681
21>	() Halloysite-7A - Al2Si2O5(OH)4		29-1487	37.9	0.12	2		P ()	5.13	5.13	7.16	163	1	2.624
22>	() Halloysite-7A - Al2Si2O5(OH)4		9- 453	37.9	0.06	2		P ()	5.12	5.12	7.30	166	1	2.582
23>	() Macaulayite - Fe24Si4O43(OH)2		42- 596	38.7	0.00	3		A ()	36.34	8.73	5.04	798	2	4.523
24>	() Coalingite - Mg10Fe2CO3(OH)24·2H		26-1217	39.8	0.06	2		R-3m (166)	3.12	3.12	37.40	105	1	2.262
25>	() Fourmarierite - PbU4O13·4H2O	+	13- 116	39.8	0.06	4		B**b (63)	14.39	16.47	14.00	1659	8	5.763
26>	() Chamosite-IT1M#I#b\RG - (Fe,A		21-1227	40.2	-0.12	4		A2/m (12)	14.16	9.29	5.37	350	2	3.117
27>	() Clinocllore-IT1M#I#a\RG, ferroa		16- 362	40.3	-0.06	4		A2/m (12)	14.20	9.29	5.32	348	2	
28>	() Berthierine-IT1H\RG - (Fe,Al)3(		31- 618	40.3	-0.06	4		P ()	5.41	5.41	7.11	181	1	
29>	() Alamosite - PbSiO3		29- 782	41.6	0.06	69		Pn (7)	12.25	7.06	11.24	893	12	6.319
30>	() Nacrite-IT2M#2\RG - Al2Si2O5(OH	+	34- 170	41.7	0.00	4	1.0	Aa (9)	14.61	5.15	8.91	329	4	2.602
31>	() Vandendriesscheite - PbU7O22·12H		13- 117	41.7	0.06	3		P*c* (51)	40.85	43.33	14.07	>9999	36	5.861
32>	() Clinocllore-IT1M#I#b\RG, ferr		7- 78	41.8	-0.06	3		A2/m (12)	14.07	9.19	5.31	340	2	2.960
33>	() Clinocllore-IT1M#I#b\RG, ferroa		16- 351	43.4	0.06	4		A2/m (12)	14.35	9.29	5.32	352	2	2.920
34>	() Berthierine-IT1M\RG - (Fe,Al)3(		7- 315	43.4	-0.12	4		A2/m (12)	7.28	9.33	5.41	178	2	
35>	() Schallerite - (Mn,Mg,Fe)8(Si,As)		12- 248	43.4	0.00	3		P ()	13.43	13.43	14.31	2235	4	3.339
36>	() Pennantite-IT1M#I#a\RG - (Mn5Al		29- 884	43.6	-0.06	4		A2/m (12)	14.40	9.50	5.45	370	2	3.184
37>	() Paragonite-IT2M#1\RG - NaAl2(Al	+	12- 165	45.5	0.06	2		A2/a (15)	19.42	8.94	5.15	445	4	2.851
38>	() Amesite-IT2H\RG - (Mg,Al)3SiAlO		34- 163	47.4	-0.12	3	1.0	P1 (1)	5.32	14.06	5.32	344	2	
39>	() Carlosturanite - Mg21Si12O28(OH)		38- 404	47.4	0.06	4		Im (8)	36.01	9.41	7.29	1235	1	1.271
40>	() Amesite-IT2H\RG - (Mg,Al,Fe)3Si		9- 493	47.4	-0.06	3		P ()	5.31	5.31	14.01	342	2	2.770

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

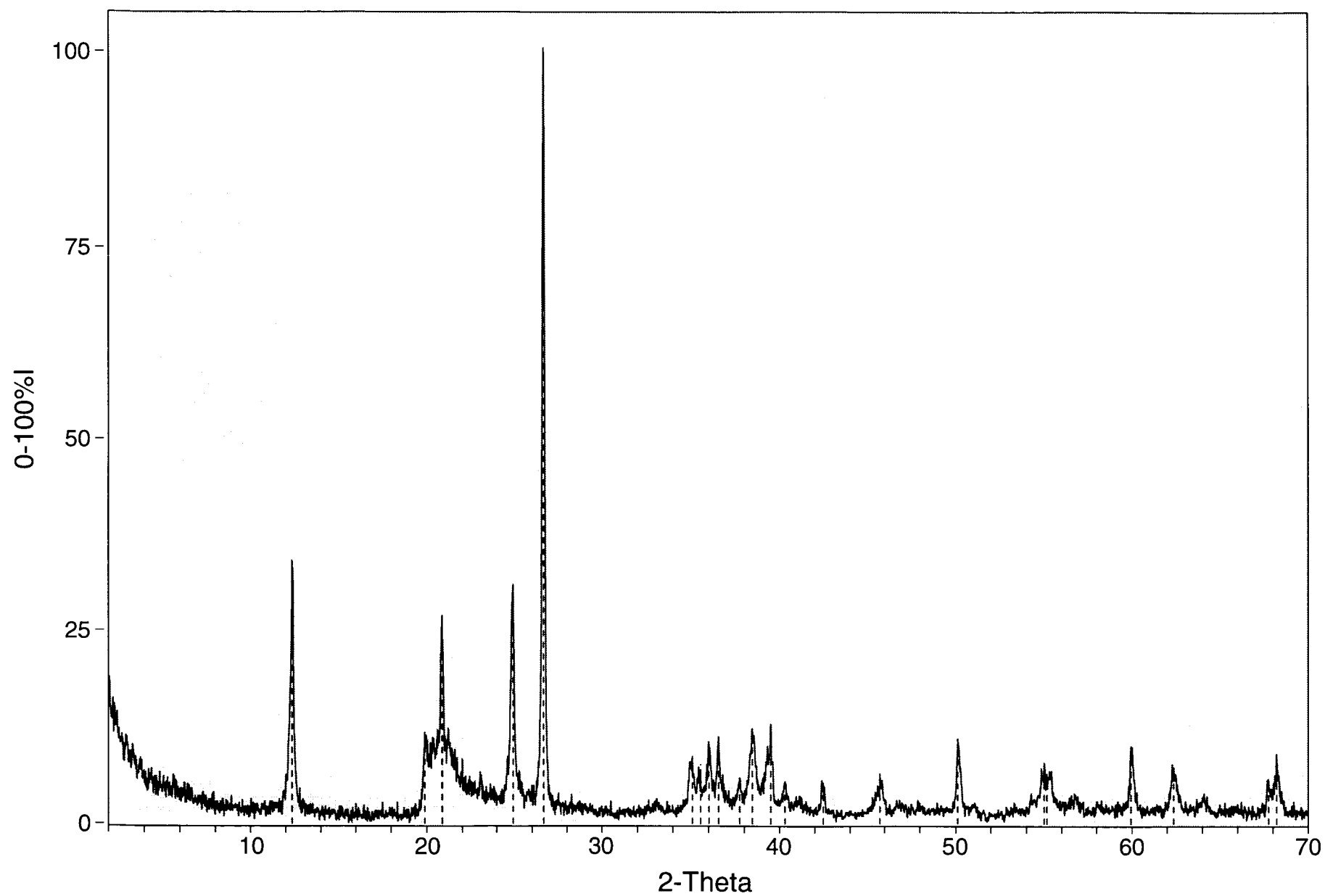
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/10/94 - NOPI-279-XRD1

File: NOPI2791.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

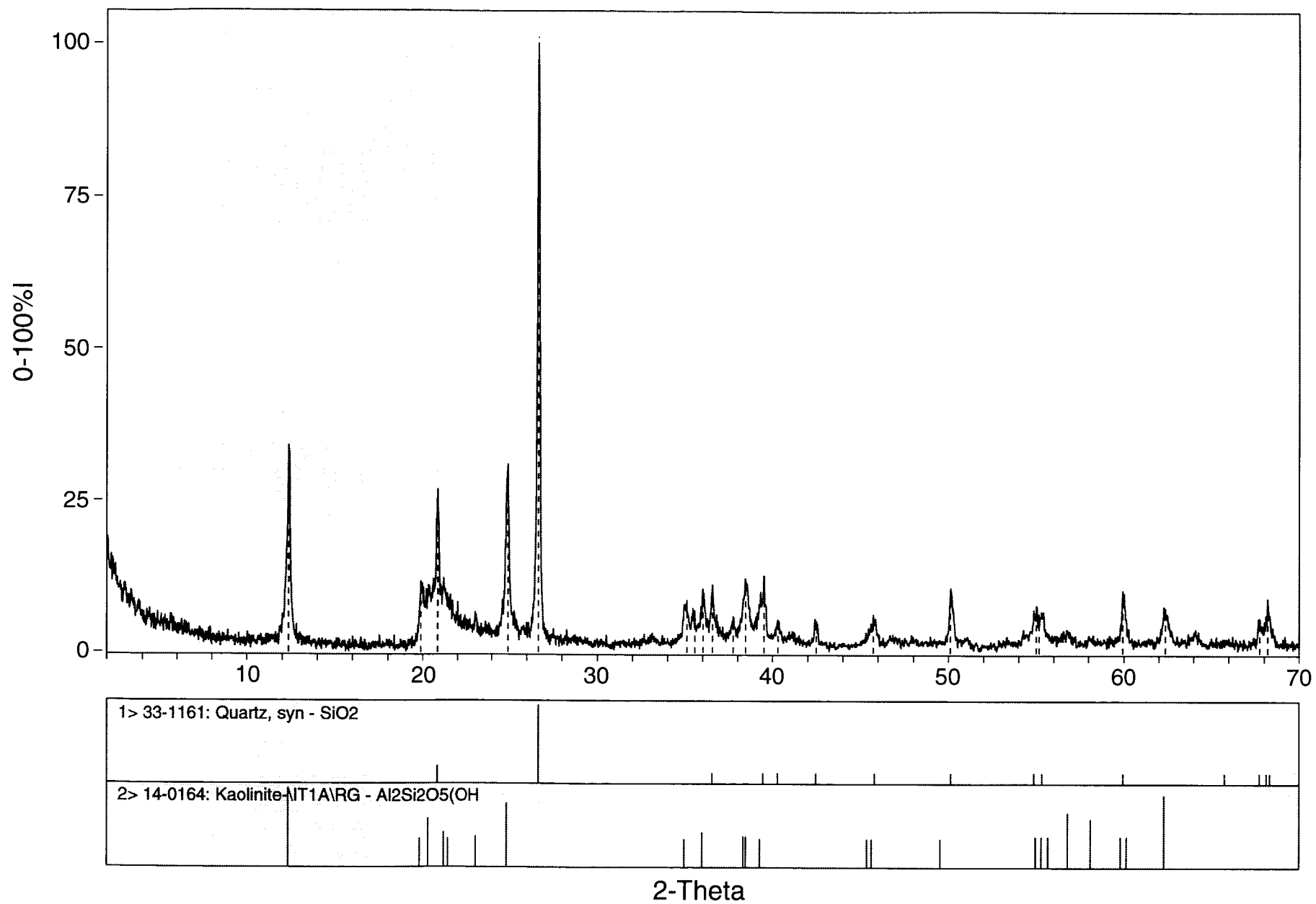


ID: 2/10/94 - NOPI-279-XRD1

File: NOPI2791.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Mon Feb 14 1994 @12:51pm

File: NOPI2791.MDI> 2/10/94 - NOPI-279-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (degs) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.359	7.1561	12.346	7.1633	7	194	33.2	2657	47.2	0.247
2:	19.883	4.4617	19.918	4.4539	15	55	9.4	681	12.1	0.223
3:	20.861	4.2548	20.855	4.2559	13	145	24.8	4771	84.7	0.592
4:	24.920	3.5701	24.891	3.5742	18	165	28.2	2248	39.9	0.245
5:	26.643	3.3430	26.643	3.3431	14	585	100.0	5631	100.0	0.173
6:	35.084	2.5557	35.069	2.5567	11	45	7.7	742	13.2	0.297
7:	35.543	2.5237	35.529	2.5247	11	37	6.3	1827	32.4	0.889
8:	36.007	2.4923	36.013	2.4919	12	53	9.1	1977	35.1	0.671
9:	36.565	2.4555	36.563	2.4556	14	54	9.2	690	12.3	0.230
10:	37.746	2.3814	37.745	2.3814	15	23	3.9	127	2.3	0.099
11:	38.447	2.3395	38.458	2.3389	14	60	10.3	1088	19.3	0.326
12:	39.487	2.2803	39.462	2.2817	14	66	11.3	728	12.9	0.199
13:	40.307	2.2357	40.307	2.2358	12	20	3.4	204	3.6	0.184
14:	42.487	2.1260	42.474	2.1265	6	29	5.0	289	5.1	0.179
15:	45.730	1.9824	45.733	1.9823	7	35	6.0	522	9.3	0.268
16:	50.113	1.8189	50.143	1.8178	5	63	10.8	755	13.4	0.216
17:	54.991	1.6685	55.006	1.6681	9	37	6.3	976	17.3	0.475
18:	55.151	1.6640	55.145	1.6642	10	32	5.5	904	16.1	0.508
19:	59.936	1.5421	59.961	1.5415	8	57	9.7	603	10.7	0.190
20:	62.374	1.4876	62.379	1.4874	7	39	6.7	736	13.1	0.340
21:	67.755	1.3819	67.768	1.3817	6	30	5.1	370	6.6	0.222
22:	68.197	1.3740	68.199	1.3740	6	47	8.0	869	15.4	0.333

* Intensity values are based on counts per second.

NOPI2791.MDI> 2/10/94 - NOPI-279-XRD1

40 Hits Sorted on	Figure-Of-Merit	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.6	0.00	95	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	1.1	0.00	96		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	1.6	0.00	87		I2/m (12)	12.15	8.01	5.08	247	4	2.687
4>	() Carlosturanite - Mg ₂ Si ₁₂ O ₂₈ (OH)		38- 404	1.7	0.00	25		Im (8)	36.01	9.41	7.29	1235	1	1.271
5>	() Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH)	+	10- 446	1.8	0.00	32		Aa (9)	14.42	8.95	5.15	330	4	2.599
6>	() Kaolinite-IT1A\RG - Al ₂ Si ₂ O ₅ (OH)	+	14- 164	1.8	0.00	25		P-1 (2)	7.41	8.96	5.16	330	2	2.595
7>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	2.0	-0.12	60		P21/m (11)	8.92	6.63	5.15	305	2	3.050
8>	() Moganite [NR] - SiO ₂		38- 360	2.2	0.00	44		I ()	8.53	10.76	4.93	226	12	2.645
9>	() Clinocllore-IT1M#I#b\RG, ferr		7- 78	2.2	-0.06	22		A2/m (12)	14.07	9.19	5.31	340	2	2.960
10>	() Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	2.2	0.12	32		I2/m (12)	12.43	5.70	7.08	250	4	6.999
11>	() Zippeite - K ₄ (UO ₂) ₆ (SO ₄) ₃ (OH) ₁₀	+	29-1062	2.2	-0.12	31		C2/m (12)	8.88	14.10	8.83	538	1	3.563
12>	() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	2.3	0.00	59		P21/n (14)	9.10	10.05	8.02	672	4	3.710
13>	() Edingtonite - BaAl ₂ Si ₃ O ₁₀ ·4H ₂ O	+	25- 61	2.4	0.00	30		P21212 (18)	9.57	9.57	6.51	596	2	2.827
14>	() Clinocllore-IT1M#I#b\RG, ferr		24- 506	2.4	-0.06	32		P1 (1)	9.27	14.36	5.34	705	2	
15>	() Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH)	+	16- 606	2.5	0.00	22		Aa (9)	14.61	5.15	8.91	329	4	2.602
16>	() Clinocllore-IT1M#I#b\RG, ferroa		16- 351	2.5	0.00	32		A2/m (12)	14.35	9.29	5.32	352	2	2.920
17>	() Unnamed mineral [NR] - K _{0.8} Na _{0.7}		34- 542	2.5	0.06	32		Ama2 (40)	14.28	14.31	9.91	1013	2	1.091
18>	() Lanarkite, syn - Pb ₂ (SO ₄)O	+	33-1486	2.5	0.12	32		I2/m (12)	12.42	5.70	7.07	249	4	7.019
19>	() Autunite - Ca(UO ₂) ₂ (PO ₄) ₂ ·10H ₂ O	+	41-1353	2.5	-0.12	21		I4/mmm (139)	7.01	7.01	20.74	509	2	3.098
20>	() Cerussite, syn - PbCO ₃	+	5- 417	2.5	0.12	30		Pnam (62)	6.14	8.50	5.18	271	4	6.555
21>	() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	2.6	0.06	60		P-62c (190)	8.56	8.56	10.76	683	2	2.546
22>	() Wollastonite-IT1A\RG - CaSiO ₃		27-1064	2.6	-0.12	32		P-1 (2)	7.33	7.93	7.07	399	6	2.903
23>	() Lizardite-IT6(3)T\RG, aluminian	+	31- 782	2.6	0.00	27		P31m (157)	5.31	5.31	42.62	1040	6	2.600
24>	() Natronambulite - NaMn ₄ Si ₅ O ₁₄ (OH)	+	39- 332	2.7	-0.06	26		P*, -1 (2)	7.62	11.76	6.74	574	2	3.609
25>	() Clinocllore-IT1M#I#a\RG, ferroa		16- 362	2.7	0.00	22		A2/m (12)	14.20	9.29	5.32	348	2	
26>	() Matteuccite, syn - NaHSO ₄ ·H ₂ O	+	22-1379	2.7	-0.12	30	1.6	Aa (9)	8.01	7.81	7.80	217	4	2.116
27>	() Schallerite - (Mn,Mg,Fe) ₈ (Si,As)		12- 248	2.7	0.12	30		P ()	13.43	13.43	14.31	2235	4	3.339
28>	() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	2.8	0.00	96		A2/a (15)	20.16	9.00	5.19	469	4	2.790
29>	() Althausite - Mg ₂ PO ₄ (OH)	+	29- 869	2.8	0.12	30		Pna21 (33)	8.26	14.38	6.05	719	8	2.967
30>	() Chamosite-IT1O#I#b\RG - (Fe,Al,		13- 29	2.8	-0.12	27		B*** (65)	9.34	14.17	5.40	357	2	3.000
31>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	2.8	0.06	46		P21/n (14)	7.40	7.49	7.31	356	2	3.652
32>	() Clinocllore-IT1M#I#b\RG, ferr	+	29- 701	2.9	-0.12	33		A2/m (12)	14.20	9.28	5.36	350	2	2.910
33>	() Uranopilite - (UO ₂) ₆ SO ₄ (OH) ₁₀ ·12		8- 443	2.9	-0.12	22								3.960
34>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	2.9	-0.12	20		P212121 (19)	11.87	11.98	6.85	974	4	1.681
35>	() Greenalite-IT1M\RG - Fe ₃ Si ₂ O ₅ (O		39- 348	2.9	0.12	31		P ()	7.44	9.70	5.60	391	2	3.154
36>	() Greenalite-IT1T\RG - Fe ₃ Si ₂ O ₅ (O		39- 337	2.9	0.12	31		P ()	7.21	9.70	5.60	392	2	3.153
37>	() Khademite - Al(SO ₄)(OH) ₁₅ H ₂ O	+	26-1011	2.9	-0.06	25		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
38>	() Microcline, ordered - KAlSi ₃ O ₈	+	19- 926	3.0	-0.12	23		P-1 (2)	7.62	7.92	7.22	361	2	2.561
39>	() Sanidine, disordered - K(Si ₃ Al) ₃ O	+	25- 618	3.0	0.00	44		I2/m (12)	8.45	13.03	7.18	362	4	2.556
40>	() Pennantite-1\ITM#I#a\RG - (Mn ₅ Al		29- 884	3.0	0.00	22		A2/m (12)	14.40	9.50	5.45	370	2	3.184

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

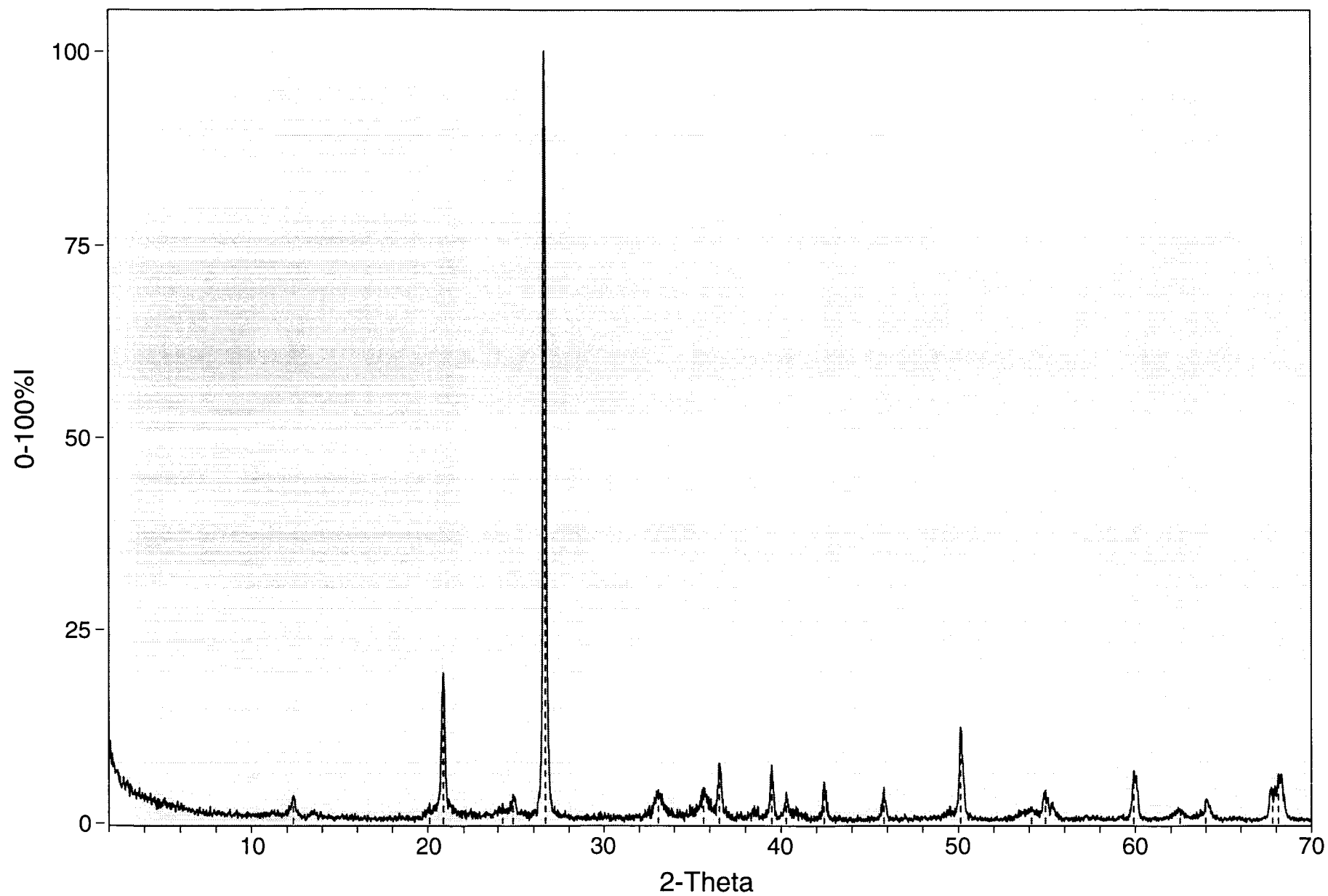
Kundom

ID: 2/10/94 - NOPI-280-XRD1

File: NOPI2801.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

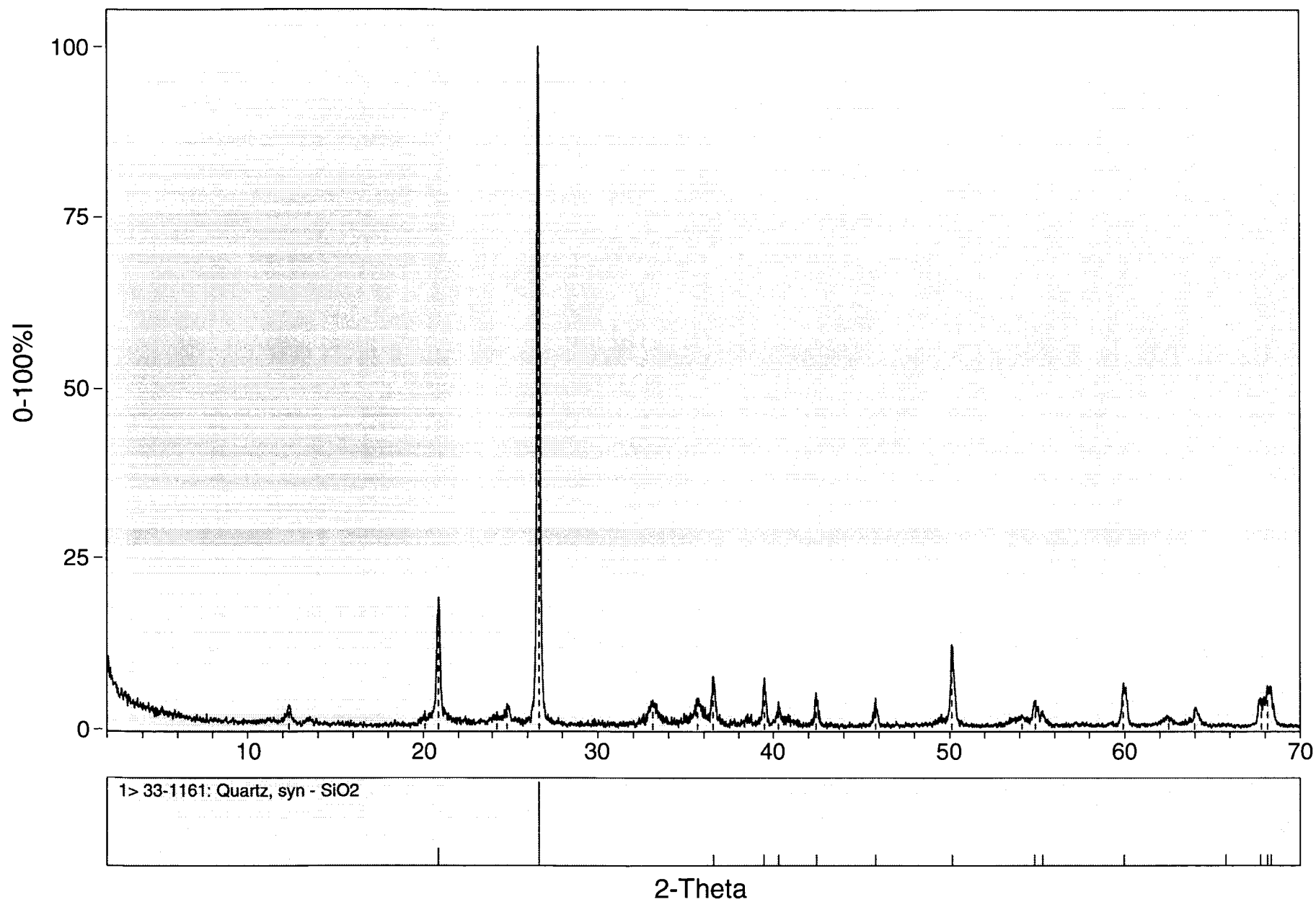


ID: 2/10/94 - NOPI-280-XRD1

File: NOPI2801.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2801.MDI> 2/10/94 - NOPI-280-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.347	7.1627	12.339	7.1674	7	33	3.1	495	4.1	0.270
2:	20.104	4.4133	20.118	4.4103	7	22	2.0	391	3.2	0.320
3:	20.864	4.2541	20.861	4.2548	6	207	19.3	3165	26.3	0.275
4:	24.264	3.6653	24.260	3.6658	9	19	1.8	146	1.2	0.138
5:	24.845	3.5808	24.852	3.5798	10	32	3.0	408	3.4	0.229
6:	26.662	3.3408	26.644	3.3430	9	1074	100.0	12036	100.0	0.202
7:	33.101	2.7041	33.100	2.7042	8	39	3.6	912	7.6	0.421
8:	35.641	2.5170	35.655	2.5160	8	42	3.9	1034	8.6	0.443
9:	36.522	2.4583	36.541	2.4570	7	77	7.2	1036	8.6	0.242
10:	39.480	2.2807	39.480	2.2807	7	75	7.0	808	6.7	0.194
11:	40.280	2.2372	40.291	2.2366	6	38	3.5	424	3.5	0.201
12:	42.439	2.1282	42.454	2.1275	5	54	5.0	604	5.0	0.201
13:	45.798	1.9797	45.798	1.9797	4	48	4.5	486	4.0	0.182
14:	50.119	1.8186	50.153	1.8175	4	131	12.2	2069	17.2	0.284
15:	54.136	1.6928	54.133	1.6929	5	19	1.8	942	7.8	0.892
16:	54.915	1.6706	54.917	1.6705	5	47	4.4	1171	9.7	0.448
17:	59.916	1.5426	59.955	1.5417	5	72	6.7	1006	8.4	0.251
18:	62.513	1.4846	62.502	1.4848	7	17	1.6	196	1.6	0.208
19:	63.977	1.4541	63.996	1.4537	6	31	2.9	254	2.1	0.147
20:	67.791	1.3812	67.829	1.3806	4	51	4.7	1142	9.5	0.403
21:	68.133	1.3751	68.149	1.3749	4	70	6.5	2066	17.2	0.531

* Intensity values are based on counts per second.

NOPI2801.MDI> 2/10/94 - NOPI-280-XRD1

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
>	() Quartz, syn - SiO ₂	+	33-1161	0.4	0.00	99	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20-452	2.7	0.00	97		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	3.9	0.06	59		P21/* (11)	8.98	6.73	5.15	311	2	2.977
4>	() Moganite [NR] - SiO ₂		38-360	4.0	0.00	49		I ()	8.53	10.76	4.93	226	12	2.645
5>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35-678	4.6	-0.12	64		P21/m (11)	8.92	6.63	5.15	305	2	3.050
6>	() Berlinite, syn - AlPO ₄	+	10-423	5.2	0.12	46		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
7>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34-151	6.6	0.00	94		I2/m (12)	12.15	8.01	5.08	247	4	2.687
8>	() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20-226	6.8	0.06	64		P-62c (190)	8.56	8.56	10.76	683	2	2.546
9>	() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26-911	8.1	-0.12	46		A2/a (15)	20.16	9.00	5.19	469	4	2.790
10>	() Akaganeite-ITM\RG, syn - FeO(OH)		34-1266	8.4	-0.12	84		I4/m (87)	10.53	10.53	3.03	168	8	3.510
11>	() Orthoclase, barian - (K,Ba)(Si,A		19-3	8.6	0.00	49		I2/m (12)	8.50	13.06	7.20	365	4	
12>	() Sanidine, disordered - K(Si ₃ Al)O	+	25-618	8.6	0.00	49		I2/m (12)	8.45	13.03	7.18	362	4	2.556
13>	() Lanarkite, syn - Pb ₂ OSO ₄	+	37-516	9.0	-0.06	72		I2/m (12)	12.43	5.70	7.08	250	4	6.999
14>	() Caminitite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39-359	11.1	0.12	49		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
15>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	11.5	-0.12	18		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
16>	() Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	12.5	0.06	84		I2/m (12)	8.59	13.05	7.20	368	4	3.390
17>	() Microcline, ordered - KAlSi ₃ O ₈	+	19-926	13.7	-0.06	11		P-1 (2)	7.62	7.92	7.22	361	2	2.561
18>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33-668	14.4	0.06	59		P21/n (14)	7.40	7.49	7.31	356	2	3.652
19>	() Dickite-IT2M#1\RG - Al ₂ Si ₂ O ₅ (OH	+	10-446	15.2	0.00	4		Aa (9)	14.42	8.95	5.15	330	4	2.599
20>	() Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	15.6	0.06	59		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
21>	() Kinoshitalite-IT1M\RG - BaMg ₃ Al	+	29-180	16.4	0.12	46		A2/m (12)	10.26	9.25	5.34	250	2	3.421
22>	() Khademite - Al(SO ₄)(OH)·5H ₂ O	+	26-1011	16.8	-0.06	18		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
23>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36-419	17.0	-0.12	16		P212121 (19)	11.87	11.98	6.85	974	4	1.681
24>	() Montmorillonite-21A - Na _{0.3} (Al,M		29-1499	17.1	-0.06	3		P ()	5.21	5.21	22.00	517	1	
25>	() Foggite - CaAl(PO ₄)(OH) ₂ ·H ₂ O		29-282	17.2	0.00	16		A2122 (20)	9.27	21.32	5.19	513	8	2.772
26>	() Paragonite-IT2M#1\RG - NaAl ₂ (Al	+	12-165	18.0	0.06	2		A2/a (15)	19.42	8.94	5.15	445	4	2.851
27>	() Montmorillonite-17A - Ca _{0.2} Al ₂ Si		19-150	18.3	0.12	3		P ()	5.18	5.18	17.58	409	1	1.936
28>	() Halloysite-7A - Al ₂ Si ₂ O ₅ (OH) ₄		29-1487	19.0	-0.12	2		P ()	5.13	5.13	7.16	163	1	2.624
29>	() Macaulayite - Fe ₂₄ Si ₄ O ₄₃ (OH) ₂		42-596	19.2	-0.12	7		A ()	36.34	8.73	5.04	798	2	4.523
30>	() Halloysite-7A - Al ₂ Si ₂ O ₅ (OH) ₄		9-453	19.7	0.00	2		P ()	5.12	5.12	7.30	166	1	2.582
31>	() Alamosite - PbSiO ₃		29-782	20.1	-0.12	46		Pn (7)	12.25	7.06	11.24	893	12	6.319
32>	() Tridymite-IT20H\RG, syn - SiO ₂		14-260	20.1	0.00	13		P ()	9.92	9.92	81.50	6946	160	2.298
33>	() Dumontite - Pb ₂ (UO ₂) ₃ (PO ₄) ₂ (OH) ₄		12-158	20.5	0.00	13		P21/m (11)	8.16	16.73	7.02	901	2	5.666
>	() Nontronite-15A - Na _{0.3} Fe ₂ Si ₄ O ₁₀ (		29-1497	20.9	0.06	2		P ()	5.21	5.21	14.88	350	1	2.359
>	() Tarasovite [NR] - NaKAl ₈ (Si,Al) ₁		26-970	21.2	0.06	10			43.85	8.88	5.13	1997	2	2.360
36>	() Winchite - NaCa(Mg,Fe,Mn,Al) ₅ Si ₈		20-1390	21.6	0.06	3		C2/m (12)	9.83	18.06	5.30	456	2	2.970
37>	() Rostite - Al(SO ₄)(OH)·5H ₂ O	+	41-1382	21.9	0.00	16		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
38>	() Nacrite-IT2M#2\RG - Al ₂ Si ₂ O ₅ (OH	+	16-606	22.8	-0.12	2		Aa (9)	14.61	5.15	8.91	329	4	2.602
39>	() Diadochite - Fe ₂ (PO ₄)(SO ₄)(OH)·5	+	42-1364	22.8	0.00	2		P*, -1 (2)	9.58	9.75	7.34	585	2	2.326
40>	() Hydrobiotite - K(Mg,Fe) ₉ (Si,Al) ₈		13-465	22.8	-0.12	2		P ()	5.20	5.20	24.40	571	1	

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

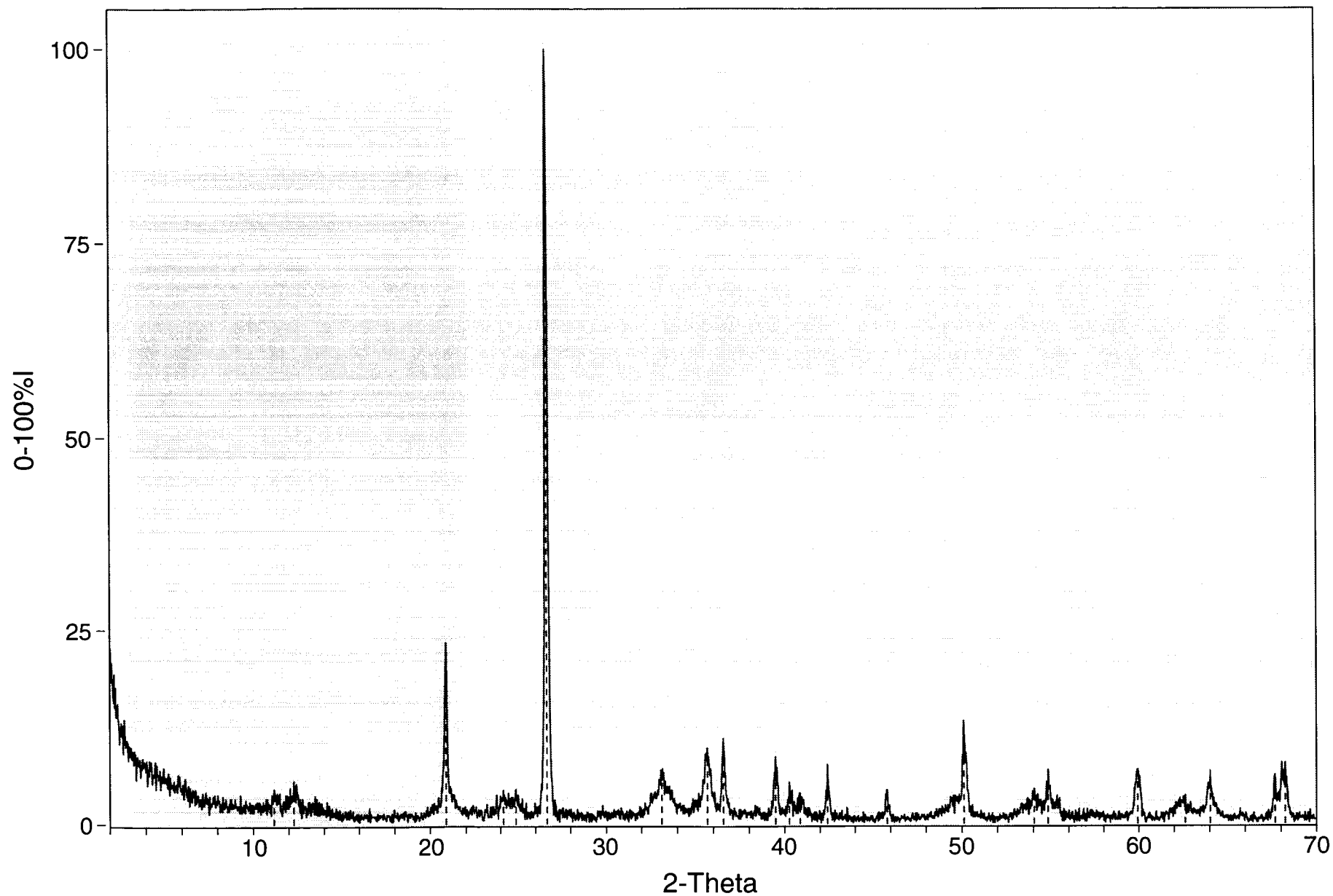
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/11/94 - NOPI-281-XRD1

File: NOPI2811.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

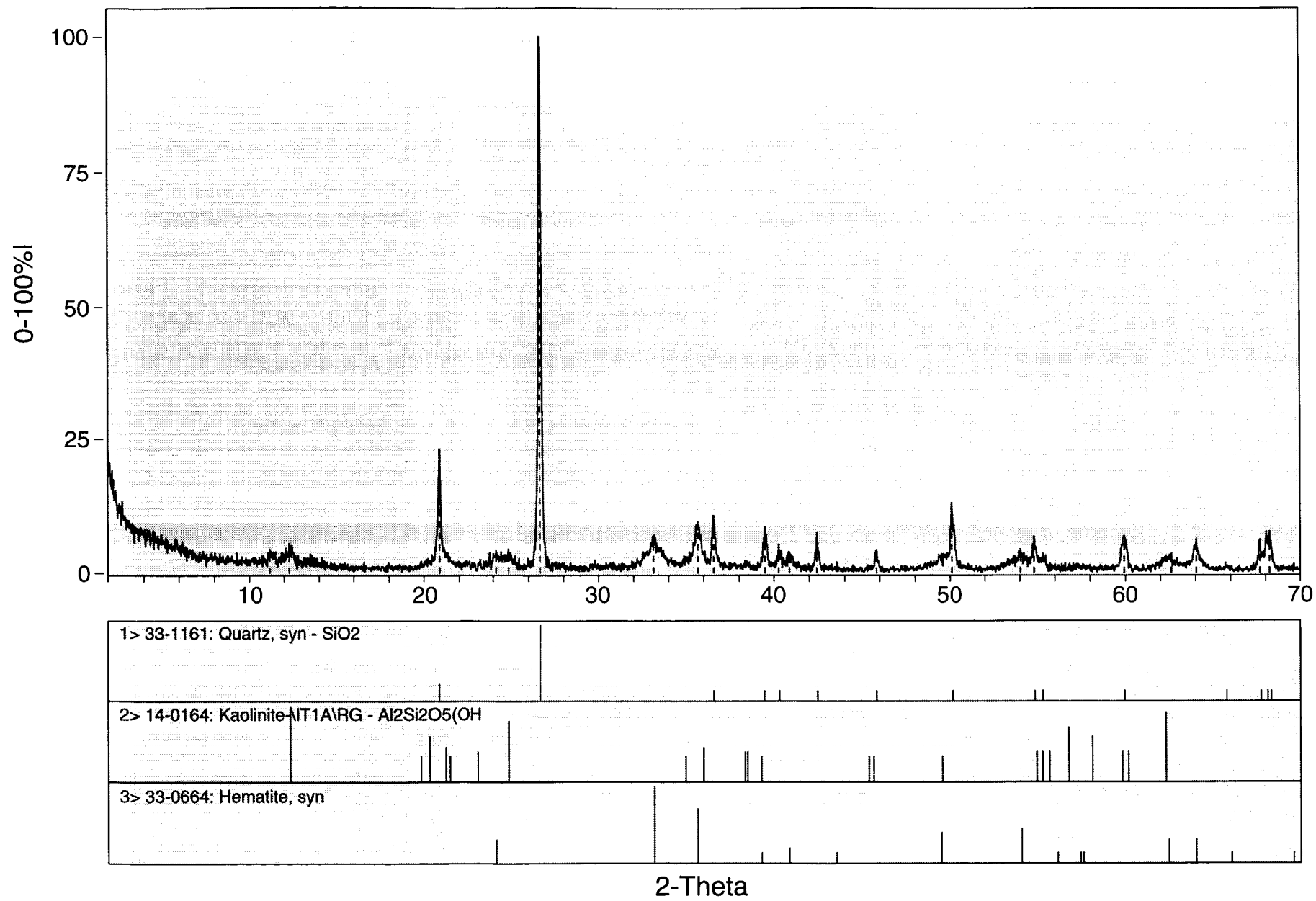


ID: 2/11/94 - NOPI-281-XRD1

File: NOPI2811.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2811.MDI> 2/11/94 - NOPI-281-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.182	7.9063	11.182	7.9064	10	17	3.0	76	1.2	0.080
2:	12.282	7.2008	12.298	7.1911	9	23	4.0	258	4.1	0.202
3:	20.888	4.2494	20.880	4.2510	5	133	23.3	1723	27.1	0.233
4:	24.164	3.6802	24.171	3.6792	5	21	3.7	278	4.4	0.238
5:	24.864	3.5782	24.854	3.5796	5	21	3.7	416	6.5	0.357
6:	26.642	3.3432	26.656	3.3416	5	572	100.0	6359	100.0	0.200
7:	33.131	2.7017	33.139	2.7011	6	36	6.3	1267	19.9	0.633
8:	35.667	2.5152	35.663	2.5155	6	58	10.1	1181	18.6	0.367
9:	36.548	2.4566	36.559	2.4559	5	62	10.8	658	10.3	0.191
10:	39.483	2.2805	39.486	2.2803	5	46	8.0	512	8.1	0.200
11:	40.264	2.2380	40.275	2.2375	4	28	4.9	252	4.0	0.162
12:	40.881	2.2057	40.891	2.2052	4	20	3.5	294	4.6	0.265
13:	42.439	2.1282	42.444	2.1280	3	42	7.3	345	5.4	0.148
14:	45.813	1.9790	45.801	1.9795	2	26	4.5	225	3.5	0.156
15:	50.109	1.8190	50.126	1.8184	3	75	13.1	1234	19.4	0.296
16:	54.041	1.6955	54.044	1.6954	4	23	4.0	1009	15.9	0.790
17:	54.822	1.6732	54.834	1.6729	4	37	6.5	880	13.8	0.428
18:	59.934	1.5421	59.930	1.5422	2	39	6.8	708	11.1	0.327
19:	62.628	1.4821	62.599	1.4827	3	21	3.7	369	5.8	0.316
20:	64.027	1.4531	64.024	1.4531	5	37	6.5	454	7.1	0.221
21:	67.683	1.3832	67.730	1.3823	2	34	5.9	867	13.6	0.459
22:	68.242	1.3732	68.194	1.3741	2	45	7.9	739	11.6	0.296

* Intensity values are based on counts per second.

NOPI2811.MDI> 2/11/94 - NOPI-281-XRDI

40 Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Quartz, syn - SiO ₂	+	33-1161	0.5	0.00	95	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	20- 452	1.5	0.00	99		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>	() Sidorenkite - Na ₃ Mn(PO ₄)(CO ₃)	+	33-1266	2.2	0.06	44		P21/* (11)	8.98	6.73	5.15	311	2	2.977
4>	() Bonshtedtite - Na ₃ Fe(PO ₄)(CO ₃)	+	35- 678	2.4	-0.12	74		P21/m (11)	8.92	6.63	5.15	305	2	3.050
5>	() Tamarugite - NaAl(SO ₄) ₂ ·6H ₂ O	+	19-1186	3.4	-0.12	21		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
6>	() Augelite - Al ₂ (PO ₄)(OH) ₃	+	34- 151	3.9	-0.06	44		I2/m (12)	12.15	8.01	5.08	247	4	2.687
7>	() Illite-IT2M#1\RG - (K,H ₃ O)Al ₂ Si	+	26- 911	3.9	0.06	74		A2/a (15)	20.16	9.00	5.19	469	4	2.790
8>	() Moganite [NR] - SiO ₂		38- 360	4.0	0.00	60		I ()	8.53	10.76	4.93	226	12	2.645
9>	() Lanarkite, syn - Pb ₂ OSO ₄	+	37- 516	4.1	0.12	47		I2/m (12)	12.43	5.70	7.08	250	4	6.999
10>	() Unnamed mineral, syn [NR] - Fe ₃ (	+	37- 481	4.1	0.00	57		P21/n (14)	9.10	10.05	8.02	672	4	3.710
11>	() Despujolsite - Ca ₃ Mn(SO ₄) ₂ (OH) ₆		20- 226	4.2	-0.06	72		P-62c (190)	8.56	8.56	10.76	683	2	2.546
12>	() Microcline, ordered - KAlSi ₃ O ₈	+	19- 926	4.4	-0.12	21		P-1 (2)	7.62	7.92	7.22	361	2	2.561
13>	() Sanidine, disordered - K(Si ₃ Al) ₃ O	+	25- 618	4.7	0.00	60		I2/m (12)	8.45	13.03	7.18	362	4	2.556
14>	() Lanarkite, syn - Pb ₂ (SO ₄) ₂ O	+	33-1486	4.9	0.12	47		I2/m (12)	12.42	5.70	7.07	249	4	7.019
15>	() Akaganeite-ITM\RG, syn - FeO(OH		34-1266	5.1	0.00	74		I4/m (87)	10.53	10.53	3.03	168	8	3.510
16>	() Khademite - Al(SO ₄)(OH) ₅ ·H ₂ O	+	26-1011	5.8	0.00	21		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
17>	() Foggite - CaAl(PO ₄)(OH) ₂ ·H ₂ O		29- 282	6.1	-0.06	21		A2122 (20)	9.27	21.32	5.19	513	8	2.772
18>	() Orthoclase, barian - (K,Ba)(Si,A		19- 3	6.1	0.00	60		I2/m (12)	8.50	13.06	7.20	365	4	
19>	() Dumontite - Pb ₂ (UO ₂) ₃ (PO ₄) ₂ (OH) ₄		12- 158	6.4	0.12	21		P21/m (11)	8.16	16.73	7.02	901	2	5.666
20>	() Macaulayite - Fe ₂₄ Si ₄₀ Al ₃ (OH) ₂		42- 596	6.6	0.06	14		A ()	36.34	8.73	5.04	798	2	4.523
21>	() Tarasovite [NR] - NaKAl ₈ (Si,Al) ₁₁		26- 970	6.6	0.06	20			43.85	8.88	5.13	1997	2	2.360
22>	() Sepiolite - Mg ₄ Si ₆ O ₁₅ (OH) ₂ ·6H ₂ O	+	26-1226	6.9	0.06	44		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
23>	() Tridymite-IT20H\RG, syn - SiO ₂		14- 260	7.2	0.12	21		P ()	9.92	9.92	81.50	6946	160	2.298
24>	() Giniite - FeFe ₄ (PO ₄) ₄ (OH) ₂ ·2H ₂ O		33- 669	7.2	0.06	44		C*** (65)	10.36	26.58	5.16	711	4	3.405
25>	() Caminite - Mg ₃ (SO ₄) ₂ (OH) ₂	+	39- 359	7.4	0.12	60		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
26>	() Celsian, syn - BaAl ₂ Si ₂ O ₈	+	38-1450	7.6	0.06	72		I2/m (12)	8.59	13.05	7.20	368	4	3.390
27>	() Barbosalite - FeFe ₂ (PO ₄) ₂ (OH) ₂	+	33- 668	7.7	0.06	44		P21/n (14)	7.40	7.49	7.31	356	2	3.652
28>	() Rostite - Al(SO ₄)(OH) ₅ ·H ₂ O	+	41-1382	8.3	0.06	22		Pcab (61)	11.19	13.06	10.89	1591	8	1.921
29>	() Gismondine - CaAl ₂ Si ₂ O ₈ ·4H ₂ O	+	39-1373	9.1	0.00	10		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
30>	() Lipscombite, manganose - (Fe,Mn)	+	14- 310	9.2	-0.12	47		P41212 (92)	7.40	7.40	12.81	701	4	3.660
31>	() Moissanite-6\ITH\RG, syn - SiC	+	29-1131	9.3	-0.06	9		P63mc (186)	3.07	3.07	15.08	123	6	3.239
32>	() Epsomite, syn - MgSO ₄ ·7H ₂ O	+	36- 419	9.4	-0.12	19		P212121 (19)	11.87	11.98	6.85	974	4	1.681
33>	() Corrensite - Mg ₉ (Si,Al) ₈ O ₂₀ (OH) ₁		42- 620	9.8	0.06	12		P ()	5.34	5.34	32.06	791	1	2.031
34>	() Forsterite, syn - Mg ₂ SiO ₄	+	34- 189	11.8	0.00	10		Pmnb (62)	5.98	10.20	4.76	290	4	3.222
35>	() Heterosite - (Fe,Mn)PO ₄	+	34- 134	13.0	-0.06	10		Pmnb (62)	5.82	9.82	4.79	274	4	3.400
36>	() Diadochite - Fe ₂ (PO ₄)(SO ₄)(OH) ₅	+	42-1364	13.1	0.06	2		P*, -1 (2)	9.58	9.75	7.34	585	2	2.326
37>	() Bulachite - Al ₂ (AsO ₄)(OH) ₃ ·3H ₂ O		37- 482	13.2	-0.12	4			15.53	17.78	7.03	1941	10	2.549
38>	() Okenite - CaSi ₂ O ₅ ·2H ₂ O	+	33- 305	13.2	-0.12	7		P*, -1 (2)	9.70	21.97	7.29	1415	9	2.241
39>	() Hydrobiotite - K(Mg,Fe) ₉ (Si,Al) ₈		13- 465	13.2	0.00	5		P ()	5.20	5.20	24.40	571	1	
40>	() Tungusite - Ca ₄ Fe ₂ Si ₆ O ₁₅ (OH) ₆		19- 231	13.4	0.00	11								2.590

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

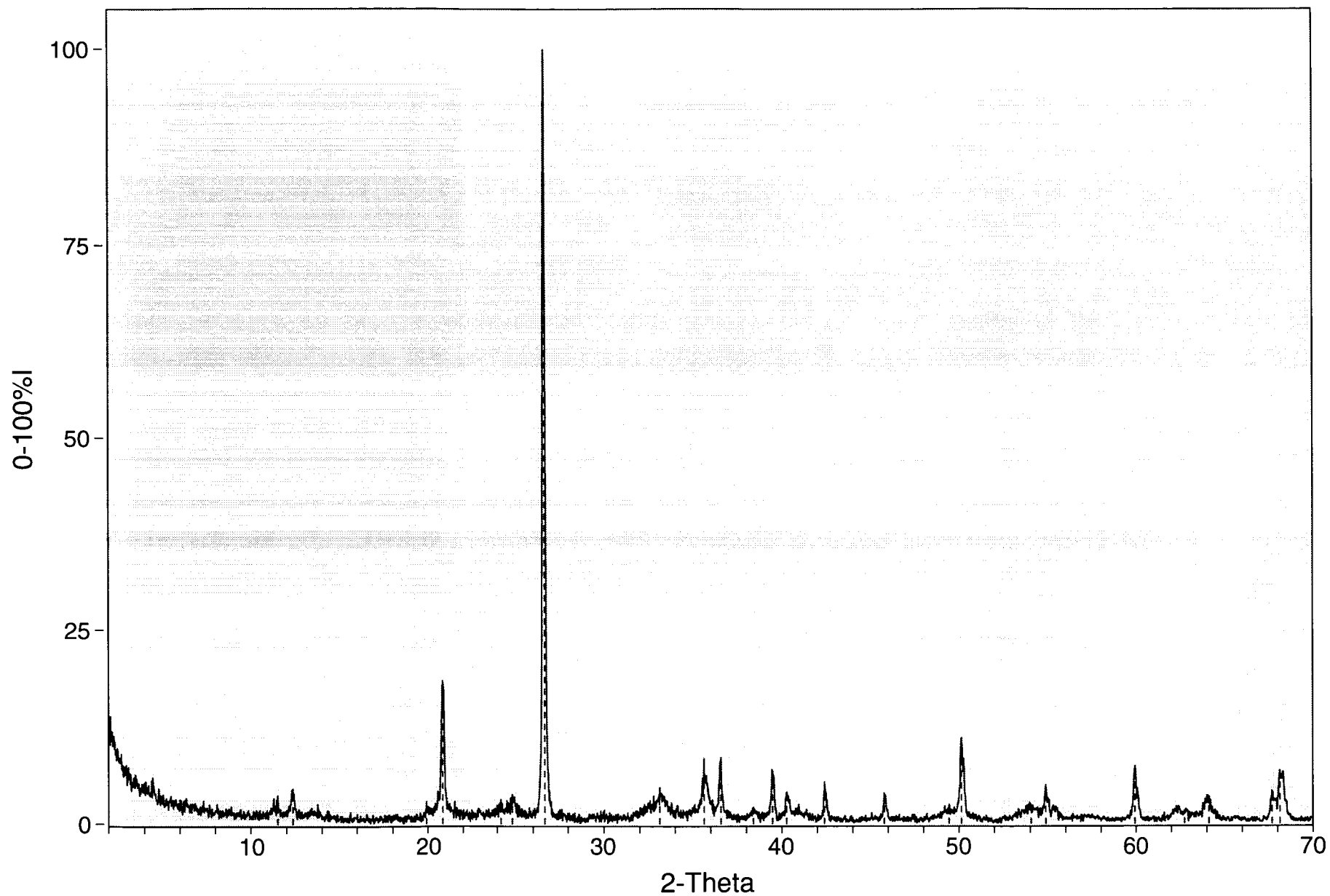
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/11/94 - NOPI-282-XRD1

File: NOPI2821.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

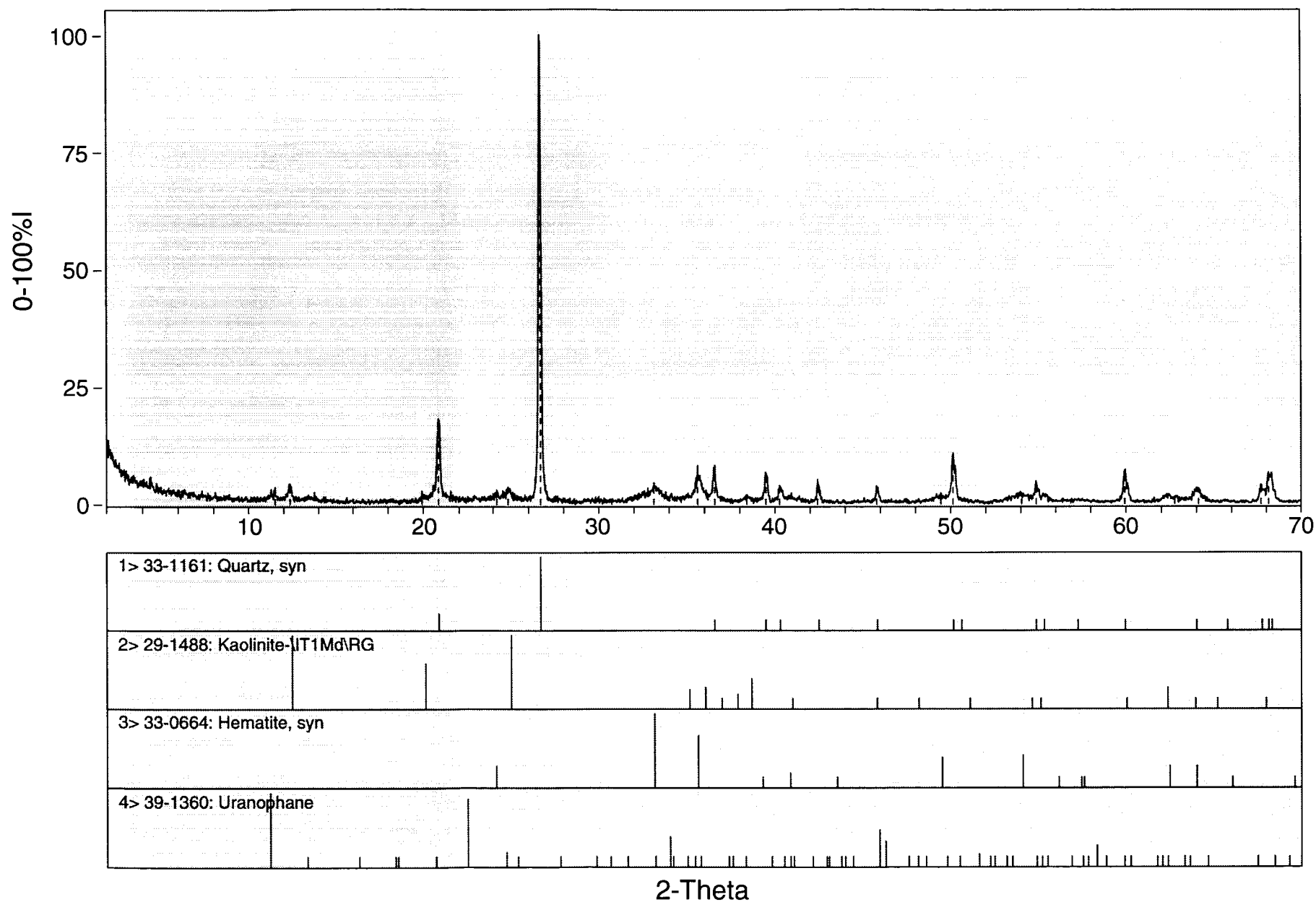


ID: 2/11/94 - NOPI-282-XRD1

File: NOPI2821.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2821.MDI> 2/11/94 - NOPI-282-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts) = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 3.0
Step Size  = .02                   || Intensity cutoff(%) = 1-100
Count Time = 1 sec.                || 2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.503	7.6866	11.493	7.6929	7	25	3.0	162	2.0	0.117
2:	12.363	7.1537	12.350	7.1614	6	34	4.1	375	4.6	0.199
3:	19.923	4.4529	19.932	4.4509	5	20	2.4	120	1.5	0.108
4:	20.842	4.2586	20.850	4.2569	5	151	18.2	2043	24.9	0.244
5:	24.200	3.6747	24.197	3.6753	8	18	2.2	101	1.2	0.101
6:	24.842	3.5813	24.850	3.5802	8	24	2.9	330	4.0	0.247
7:	26.678	3.3388	26.652	3.3420	7	831	100.0	8204	100.0	0.178
8:	33.139	2.7011	33.155	2.6998	8	32	3.9	762	9.3	0.429
9:	35.618	2.5186	35.645	2.5167	8	64	7.7	876	10.7	0.246
10:	36.576	2.4548	36.557	2.4561	7	67	8.1	628	7.7	0.169
11:	38.397	2.3425	38.401	2.3422	5	15	1.8	129	1.6	0.155
12:	39.477	2.2808	39.486	2.2803	5	53	6.4	581	7.1	0.197
13:	40.258	2.2383	40.282	2.2371	4	31	3.7	350	4.3	0.203
14:	42.418	2.1293	42.437	2.1283	3	43	5.2	367	4.5	0.154
15:	45.777	1.9805	45.800	1.9796	3	31	3.7	269	3.3	0.156
16:	49.435	1.8422	49.429	1.8424	3	19	2.3	579	7.1	0.549
17:	50.135	1.8181	50.155	1.8174	3	95	11.4	1607	19.6	0.304
18:	54.052	1.6952	54.051	1.6953	3	19	2.3	893	10.9	0.846
19:	54.873	1.6718	54.890	1.6713	5	37	4.5	495	6.0	0.241
20:	59.932	1.5422	59.957	1.5416	3	62	7.5	812	9.9	0.236
21:	62.752	1.4795	62.756	1.4794	4	13	1.6	156	1.9	0.216
22:	64.109	1.4514	64.075	1.4521	5	28	3.4	536	6.5	0.345
23:	67.690	1.3831	67.732	1.3823	2	35	4.2	511	6.2	0.263
24:	68.131	1.3752	68.163	1.3746	2	58	7.0	1531	18.7	0.475

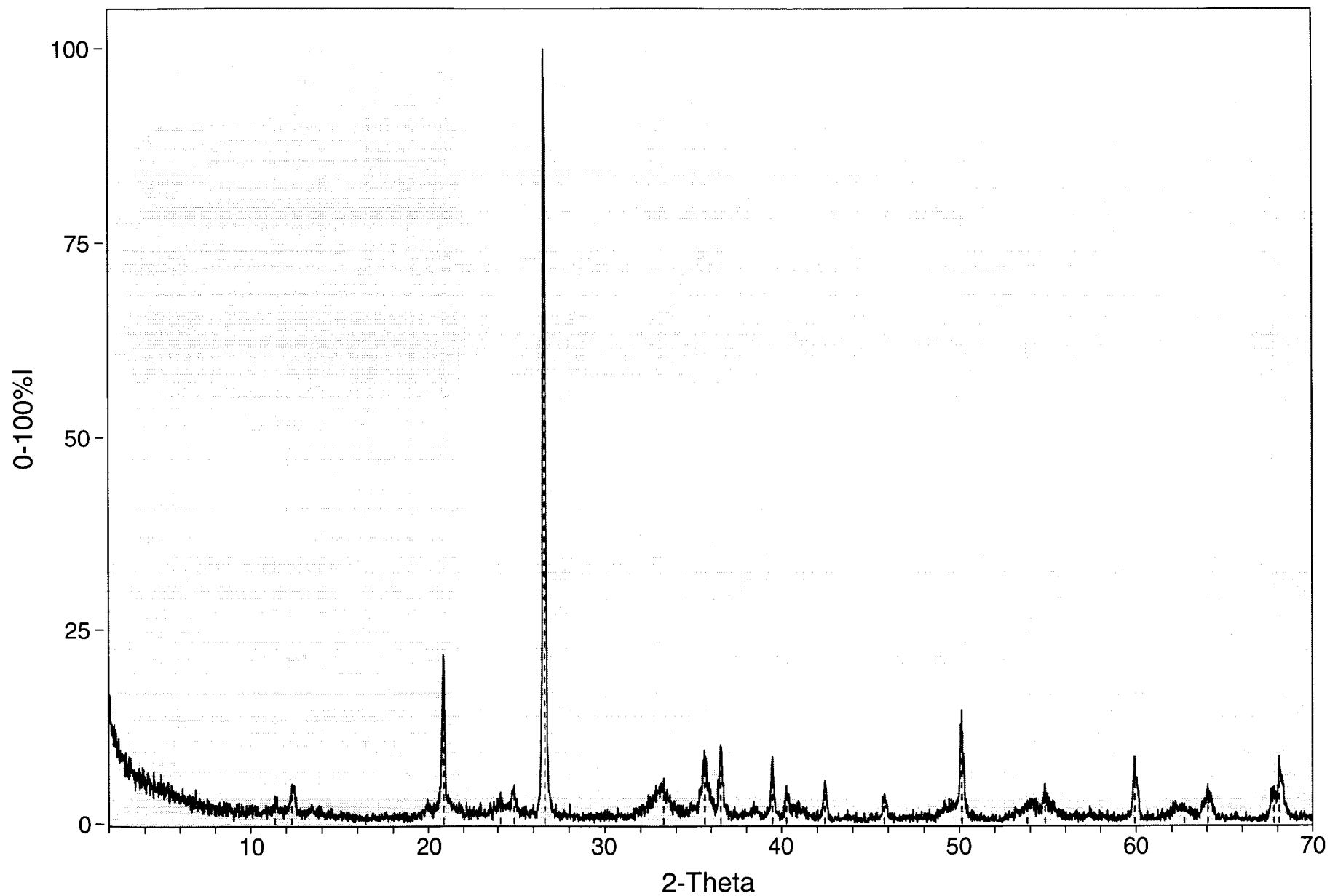
* Intensity values are based on counts per second.

ID: 2/11/94 - NOPI-283-XRD1

File: NOPI2831.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

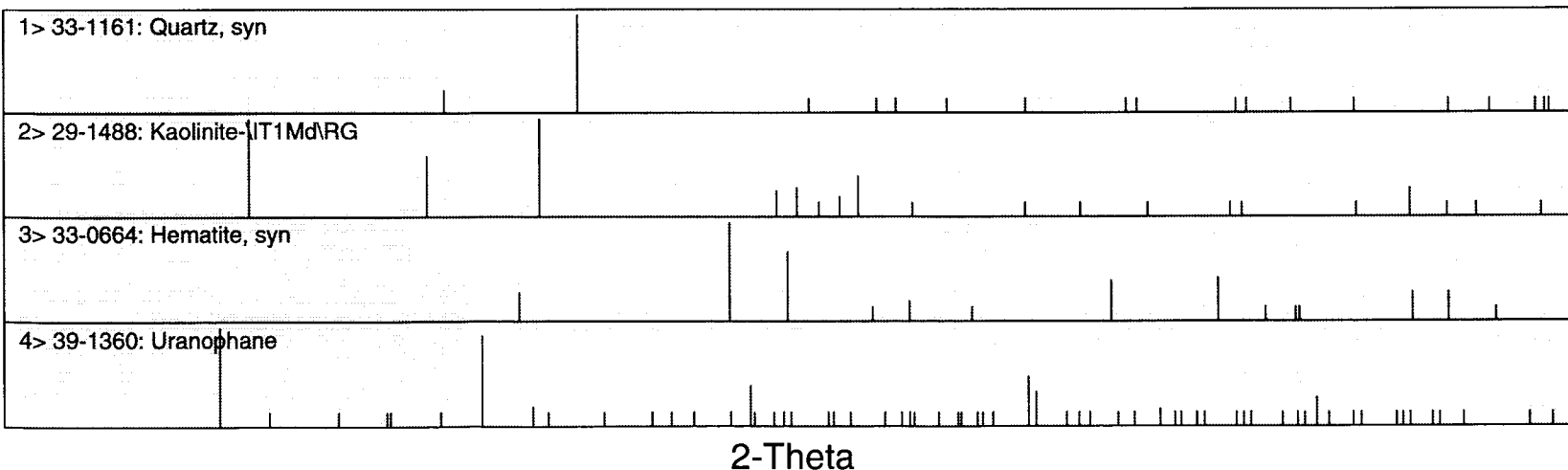
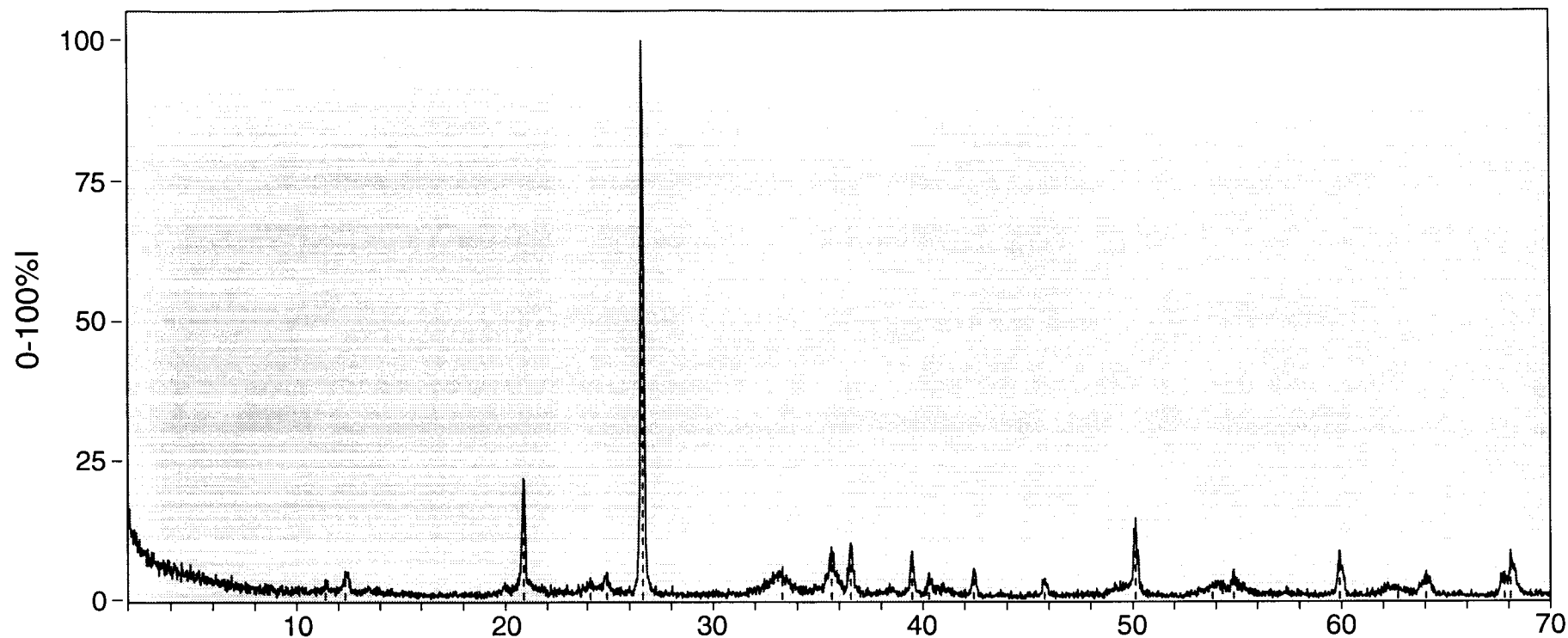


ID: 2/11/94 - NOPI-283-XRD1

File: NOPI2831.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2831.MDI> 2/11/94 - NOPI-283-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts) = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 3.0
Step Size  = .02                   || Intensity cutoff(%) = 1-100
Count Time = 1 sec.                || 2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.382	7.7679	11.383	7.7670	9	18	2.5	74	1.0	0.074
2:	12.324	7.1762	12.348	7.1625	8	30	4.1	375	5.3	0.225
3:	20.879	4.2511	20.865	4.2540	6	155	21.1	1839	26.0	0.214
4:	24.140	3.6838	24.142	3.6834	7	23	3.1	329	4.6	0.257
5:	24.919	3.5704	24.903	3.5726	7	30	4.1	343	4.8	0.206
6:	26.641	3.3434	26.639	3.3435	6	734	100.0	7086	100.0	0.174
7:	33.298	2.6886	33.274	2.6904	8	36	4.9	954	13.5	0.477
8:	35.639	2.5171	35.637	2.5173	8	62	8.4	1164	16.4	0.338
9:	36.540	2.4571	36.548	2.4566	7	68	9.3	800	11.3	0.212
10:	39.480	2.2807	39.475	2.2809	6	58	7.9	568	8.0	0.176
11:	40.282	2.2371	40.296	2.2363	5	31	4.2	307	4.3	0.178
12:	42.440	2.1282	42.445	2.1279	3	38	5.2	411	5.8	0.195
13:	45.780	1.9804	45.789	1.9800	3	25	3.4	306	4.3	0.220
14:	50.139	1.8179	50.138	1.8180	3	106	14.4	1424	20.1	0.242
15:	53.839	1.7014	53.870	1.7005	4	18	2.5	712	10.0	0.712
16:	54.858	1.6722	54.869	1.6719	5	35	4.8	801	11.3	0.412
17:	59.919	1.5425	59.942	1.5420	4	60	8.2	766	10.8	0.230
18:	62.719	1.4802	62.706	1.4805	4	15	2.0	175	2.5	0.210
19:	64.039	1.4528	64.045	1.4527	5	32	4.4	576	8.1	0.324
20:	67.797	1.3811	67.838	1.3804	3	33	4.5	762	10.8	0.416
21:	68.101	1.3757	68.120	1.3754	3	63	8.6	1347	19.0	0.385

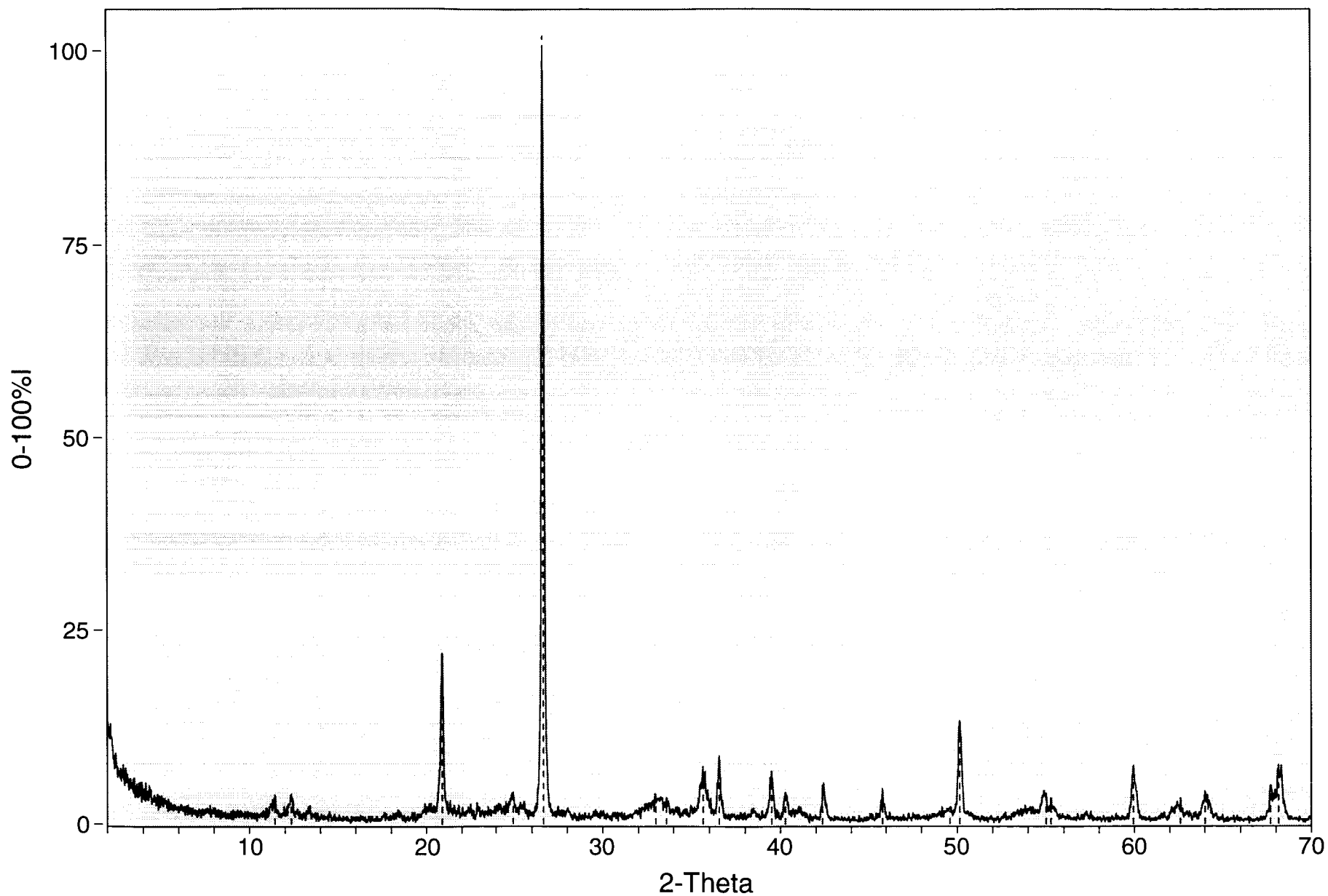
* Intensity values are based on counts per second.

ID: 2/11/94 - NOPI-284-XRD1

File: NOPI2841.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

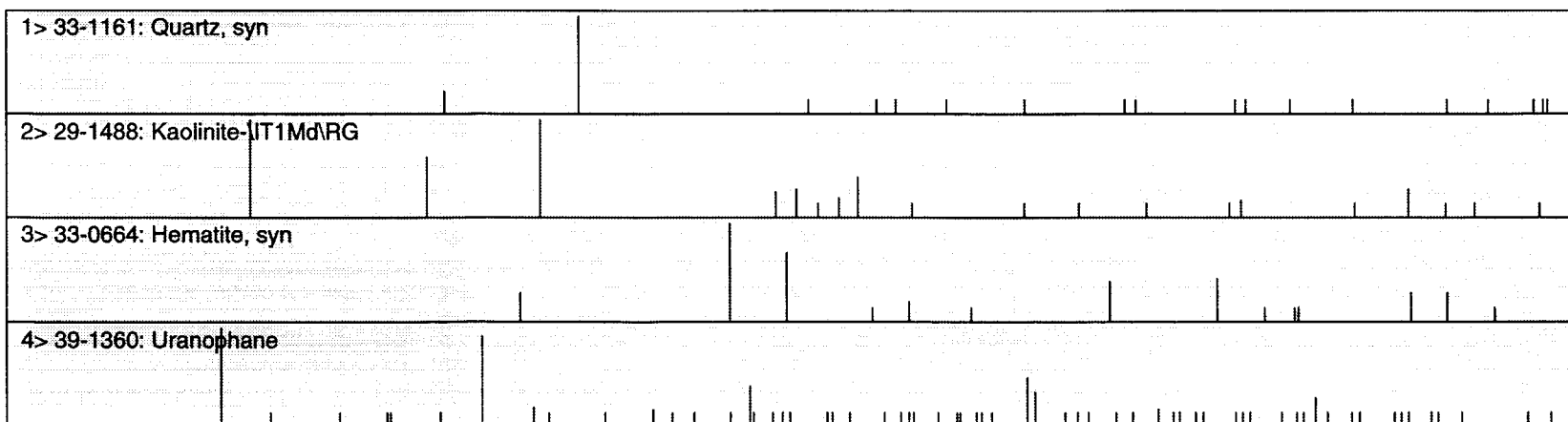
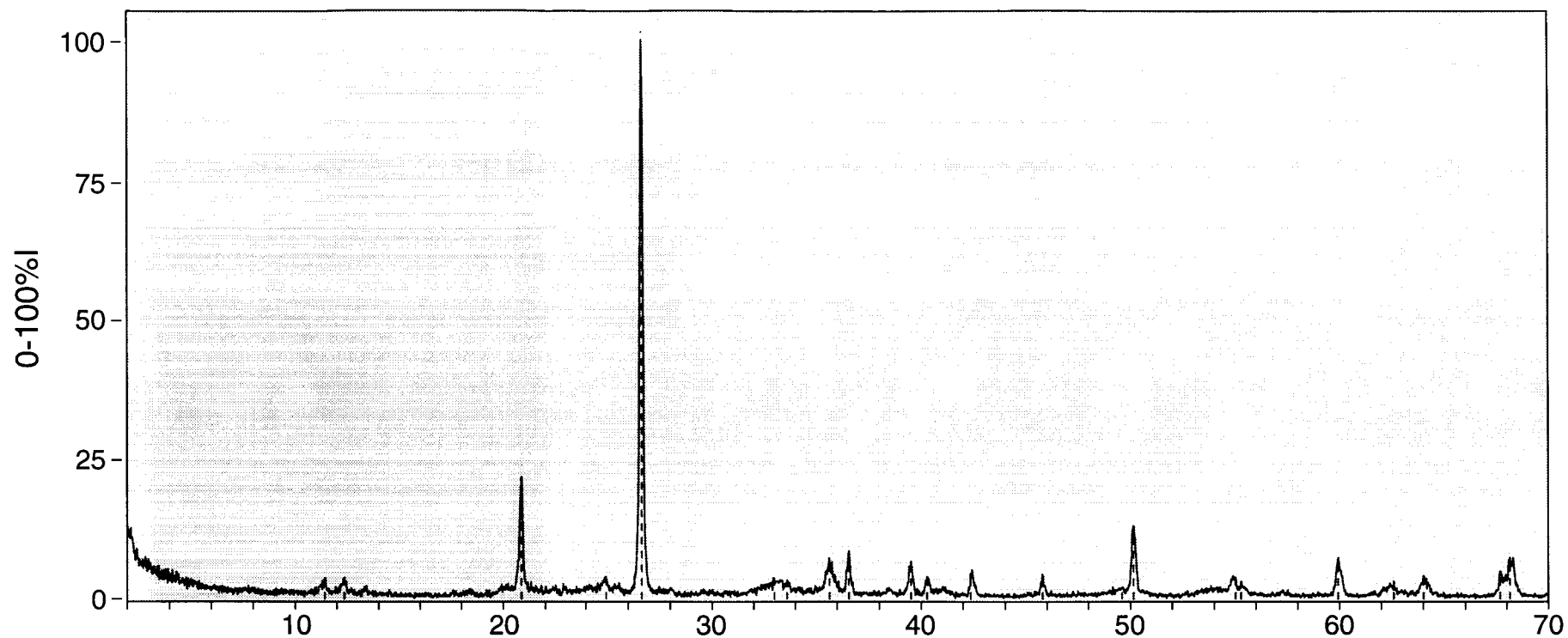


ID: 2/11/94 - NOPI-284-XRD1

File: NOPI2841.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



2-Theta

File: NOPI2841.MDI> 2/11/94 - NOPI-284-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.422	7.7408	11.412	7.7477	8	26	2.8	222	2.4	0.154
2:	12.361	7.1547	12.351	7.1609	8	27	2.9	263	2.8	0.175
3:	20.863	4.2543	20.853	4.2563	7	198	21.6	2207	23.5	0.201
4:	24.942	3.5671	24.922	3.5699	10	28	3.1	303	3.2	0.195
5:	26.644	3.3429	26.638	3.3437	8	918	100.0	9394	100.0	0.184
6:	32.986	2.7133	33.005	2.7118	8	27	2.9	1203	12.8	0.802
7:	33.606	2.6647	33.600	2.6651	9	23	2.5	240	2.6	0.188
8:	35.646	2.5167	35.647	2.5166	8	59	6.4	1103	11.7	0.337
9:	36.545	2.4568	36.547	2.4567	7	72	7.8	759	8.1	0.190
10:	39.505	2.2793	39.492	2.2800	7	58	6.3	629	6.7	0.195
11:	40.268	2.2378	40.281	2.2371	6	35	3.8	334	3.6	0.172
12:	42.370	2.1316	42.385	2.1308	6	45	4.9	279	3.0	0.112
13:	45.787	1.9801	45.789	1.9800	4	40	4.4	359	3.8	0.162
14:	49.586	1.8369	49.578	1.8372	5	16	1.7	528	5.6	0.594
15:	50.148	1.8177	50.154	1.8174	5	119	13.0	1842	19.6	0.279
16:	55.024	1.6675	54.990	1.6685	7	33	3.6	709	7.5	0.387
17:	55.289	1.6602	55.260	1.6610	8	27	2.9	391	4.2	0.261
18:	59.929	1.5422	59.958	1.5416	4	68	7.4	943	10.0	0.250
19:	62.607	1.4826	62.591	1.4829	6	29	3.2	202	2.2	0.125
20:	64.009	1.4534	64.034	1.4529	5	36	3.9	552	5.9	0.276
21:	67.691	1.3831	67.750	1.3820	3	43	4.7	754	8.0	0.316
22:	68.151	1.3748	68.167	1.3746	3	72	7.8	1800	19.2	0.450

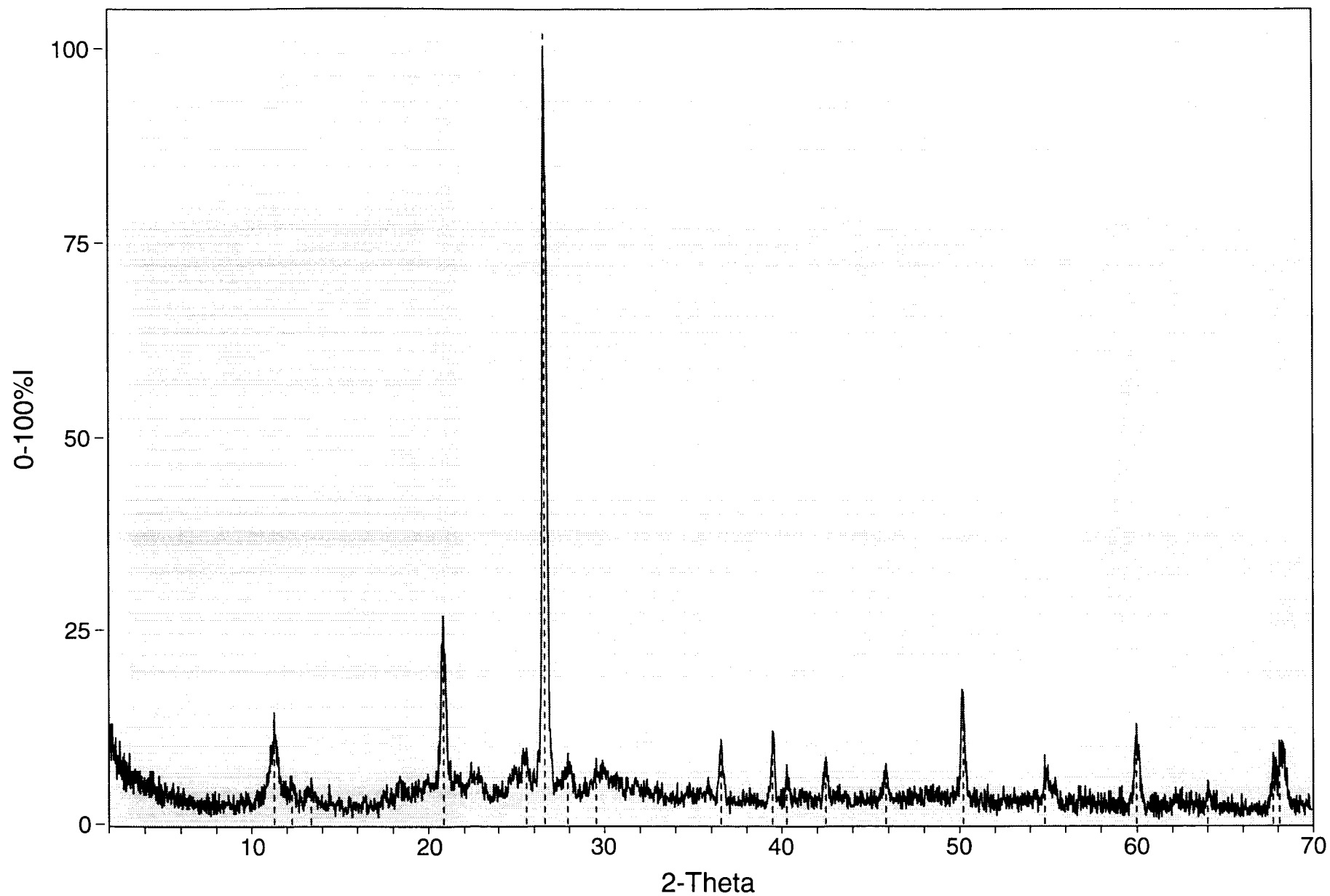
* Intensity values are based on counts per second.

ID: 2/11/94 - NOPI-285-XRD1

File: NOPI2851.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

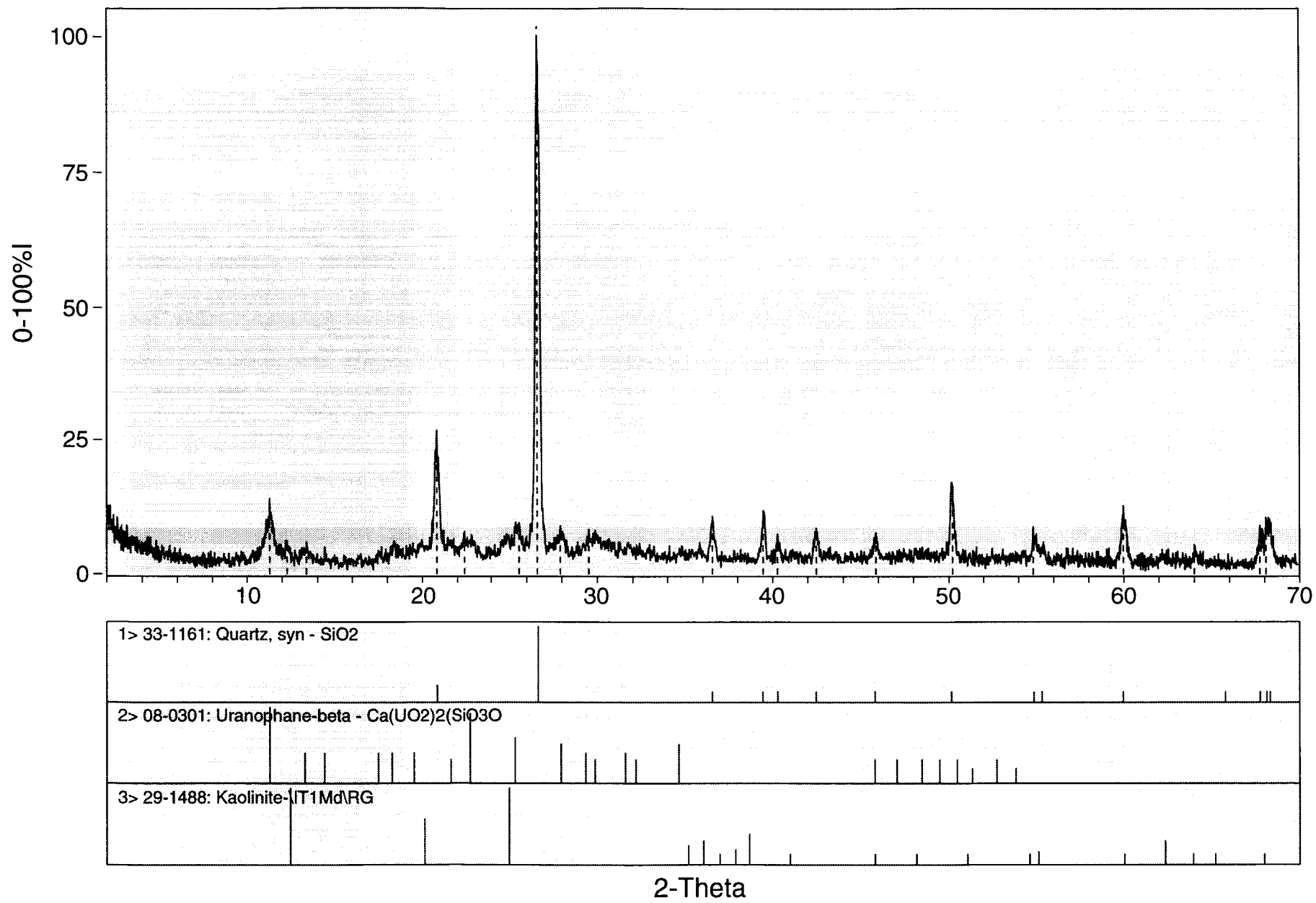


ID: 2/11/94 - NOPI-285-XRD1

File: NOPI2851.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2851.MDI> 2/11/94 - NOPI-285-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 1-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.284	7.8350	11.285	7.8344	10	58	13.0	1127	17.4	0.350
2:	12.265	7.2109	12.266	7.2102	11	19	4.3	86	1.3	0.081
3:	13.384	6.6103	13.384	6.6102	10	19	4.3	118	1.8	0.112
4:	20.827	4.2616	20.830	4.2610	17	109	24.5	1577	24.4	0.260
5:	25.567	3.4813	25.554	3.4831	16	32	7.2	345	5.3	0.194
6:	26.610	3.3472	26.628	3.3449	20	445	100.0	6476	100.0	0.262
7:	27.910	3.1942	27.916	3.1935	17	27	6.1	231	3.6	0.154
8:	29.529	3.0226	29.530	3.0225	16	23	5.2	182	2.8	0.142
9:	36.552	2.4563	36.555	2.4562	12	39	8.8	426	6.6	0.197
10:	39.475	2.2809	39.485	2.2804	11	43	9.7	482	7.4	0.202
11:	40.275	2.2374	40.281	2.2371	11	26	5.8	172	2.7	0.119
12:	42.474	2.1266	42.473	2.1266	11	29	6.5	324	5.0	0.201
13:	45.855	1.9773	45.852	1.9775	12	25	5.6	227	3.5	0.163
14:	50.215	1.8154	50.195	1.8161	12	68	15.3	864	13.3	0.229
15:	54.821	1.6733	54.835	1.6728	9	32	7.2	220	3.4	0.124
16:	59.980	1.5411	59.992	1.5408	7	51	11.5	747	11.5	0.264
17:	64.003	1.4535	64.007	1.4535	7	19	4.3	95	1.5	0.090
18:	67.724	1.3825	67.750	1.3820	7	34	7.6	380	5.9	0.201
19:	68.085	1.3760	68.107	1.3756	7	43	9.7	1233	19.0	0.516

* Intensity values are based on counts per second.

NOPI2851.MDI> 2/11/94 - NOPI-285-XRD1

40 Hits Sorted on Figure-Of-Merit

	QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>() Quartz, syn - SiO2	+	33-1161	0.7	0.00	93	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>() Gismondine - CaAl2Si2O8·4H2O	+	20-452	0.8	0.00	90		P21/c (14)	10.02	10.61	9.84	1046	4	2.224
3>() Berlinite, syn - AlPO4	+	10-423	1.1	0.12	80		P31,212 (151)	4.94	4.94	10.97	232	3	2.618
4>() Augelite - Al2(PO4)(OH)3	+	34-151	1.2	0.00	95		I2/m (12)	12.15	8.01	5.08	247	4	2.687
5>() Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	1.3	0.00	58		P21/* (11)	8.98	6.73	5.15	311	2	2.977
6>() Moganite [NR] - SiO2		38-360	1.3	0.00	70		I ()	8.53	10.76	4.93	226	12	2.645
7>() Orthoclase, barian - (K,Ba)(Si,A		19-3	1.4	0.00	70		I2/m (12)	8.50	13.06	7.20	365	4	
8>() Sanidine, disordered - K(Si3Al)O	+	25-618	1.5	0.00	70		I2/m (12)	8.45	13.03	7.18	362	4	2.556
9>() Orthoclase - KAlSi3O8	+	31-966	1.5	-12	49		I2/m (12)	8.43	12.98	7.20	360	4	2.571
10>() Lanarkite, syn - Pb2OSO4	+	37-516	1.5	0.00	93		I2/m (12)	12.43	5.70	7.08	250	4	6.999
11>() Sainfeldite - Ca5H2(AsO4)4H2O		16-615	1.6	0.12	80		C2/c (15)	18.64	9.81	10.12	918	8	2.990
12>() Akaganeite-ITM\RG, syn - FeO(OH		34-1266	1.6	0.00	77		I4/m (87)	10.53	10.53	3.03	168	8	3.510
13>() Gismondine - CaAl2Si2O8·4H2O	+	39-1373	1.8	0.00	24		P21/c (14)	10.02	10.64	9.84	1047	4	2.221
14>() Lanarkite, syn - Pb2(SO4)O	+	33-1486	1.9	0.00	93		I2/m (12)	12.42	5.70	7.07	249	4	7.019
15>() Unnamed mineral, syn [NR] - Fe3(	+	37-481	2.0	0.00	93		P21/n (14)	9.10	10.05	8.02	672	4	3.710
16>() Dumontite - Pb2(UO2)3(PO4)2(OH)4		12-158	2.0	0.06	23		P21/m (11)	8.16	16.73	7.02	901	2	5.666
17>() Microcline, ordered - KAlSi3O8	+	19-926	2.0	-12	20		P-1 (2)	7.62	7.92	7.22	361	2	2.561
18>() Illite-IT2M#1\RG - (K,H3O)Al2Si	+	26-911	2.0	0.00	90		A2/a (15)	20.16	9.00	5.19	469	4	2.790
19>() Bonshedtite - Na3Fe(PO4)(CO3)	+	35-678	2.0	-06	49		P21/m (11)	8.92	6.63	5.15	305	2	3.050
20>() Despujolsite - Ca3Mn(SO4)2(OH)6!		20-226	2.1	0.00	90		P-62c (190)	8.56	8.56	10.76	683	2	2.546
21>() Potassium alum, syn - KAl(SO4)2!	+	7-17	2.1	0.12	22		Pa3 (205)	12.16	12.16	12.16	1797	4	1.754
22>() Barboselite - FeFe2(PO4)2(OH)2	+	33-668	2.1	0.00	58		P21/n (14)	7.40	7.49	7.31	356	2	3.652
23>() Giniite - FeFe4(PO4)4(OH)2!2H2O		33-669	2.1	0.00	58		C*** (65)	10.36	26.58	5.16	711	4	3.405
24>() Purpurite - (Mn,Fe)PO4		37-478	2.2	0.12	24		Pmnb (62)	5.82	9.77	4.78	272	4	
25>() Foggitte - CaAl(PO4)(OH)2!H2O		29-282	2.2	-06	23		A2122 (20)	9.27	21.32	5.19	513	8	2.772
26>() Celsian, syn - BaAl2Si2O8	+	38-1450	2.3	0.00	80		I2/m (12)	8.59	13.05	7.20	368	4	3.390
27>() Wollastonite-IT1A\RG - CaSiO3		27-1064	2.4	-06	29		P-1 (2)	7.33	7.93	7.07	399	6	2.903
28>() Tridymite-IT20H\RG, syn - SiO2		14-260	2.4	0.00	24		P ()	9.92	9.92	81.50	6946	160	2.298
29>() Dorfmanite, syn - Na2HPO4!2H2O		10-190	2.5	0.00	58		P ()	10.34	16.82	6.60	1148	8	2.060
30>() Caminite - Mg3(SO4)2(OH)2	+	39-359	2.5	0.00	95		I41/amd (141)	5.25	5.25	12.99	179	2	2.775
31>() Lipscombite, manganoan - (Fe,Mn)	+	14-310	2.6	-06	29		P41212 (92)	7.40	7.40	12.81	701	4	3.660
32>() Sepiolite - Mg4Si6O15(OH)2!6H2O	+	26-1226	2.7	0.00	58		Pncn (52)	13.43	26.88	5.28	1906	4	2.257
33>() Kinoshitalite-IT1M\RG - BaMg3Al	+	29-180	2.8	0.12	80		A2/m (12)	10.26	9.25	5.34	250	2	3.421
34>() Alamosite - PbSiO3		29-782	3.0	0.12	49		Pn (7)	12.25	7.06	11.24	893	12	6.319
35>() Tamarugite - NaAl(SO4)2!6H2O	+	19-1186	3.2	-12	20		P21/m (11)	7.35	25.23	6.10	1126	4	2.065
36>() Uranophane-beta - Ca(UO2)2(SiO3O	+	8-301	3.3	0.06	12		P21/a (14)	14.01	15.55	6.64	1446	4	3.933
37>() Khademite - Al(SO4)(OH)!5H2O	+	26-1011	3.6	-12	24		Pcab (61)	11.18	13.06	10.89	1589	8	1.924
38>() Dundasite - Pb2Al4(CO3)4(OH)8!3H	+	21-936	3.9	0.12	12		Pbmm (51)	9.05	16.35	5.61	830	2	3.811
39>() Bergenite - Ba(UO2)4(PO4)2(OH)4!		20-154	4.1	-12	11		Bmmb (63)	16.05	17.76	13.86	1975	6	4.084
40>() Bayleyite - Mg2(UO2)(CO3)3!18H2O		4-130	4.3	-12	10		P21/a (14)	26.65	15.31	6.53	2660	4	2.055

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

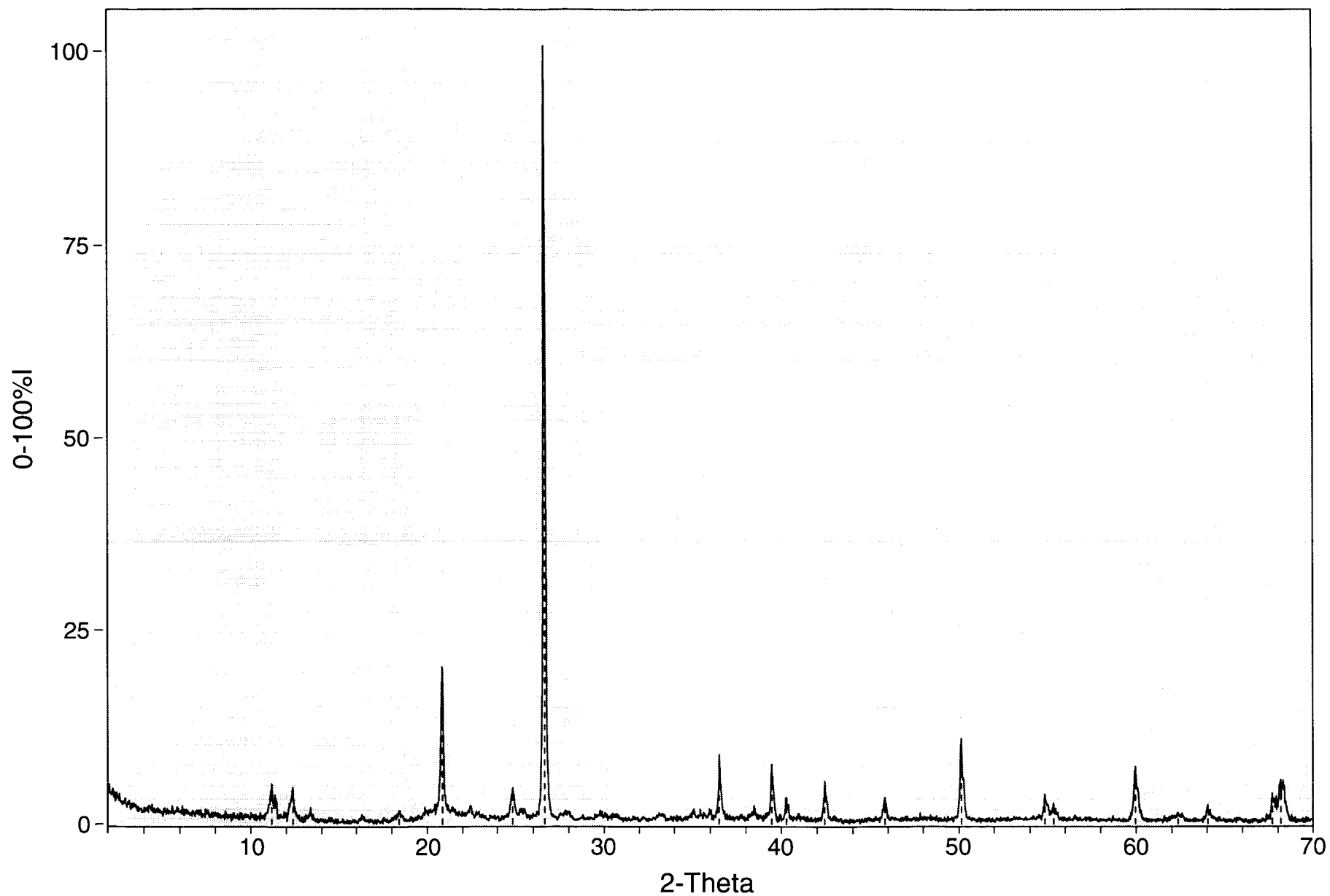
* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 2/17/94 - NOPI-286-XRD1

File: NOPI2861.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

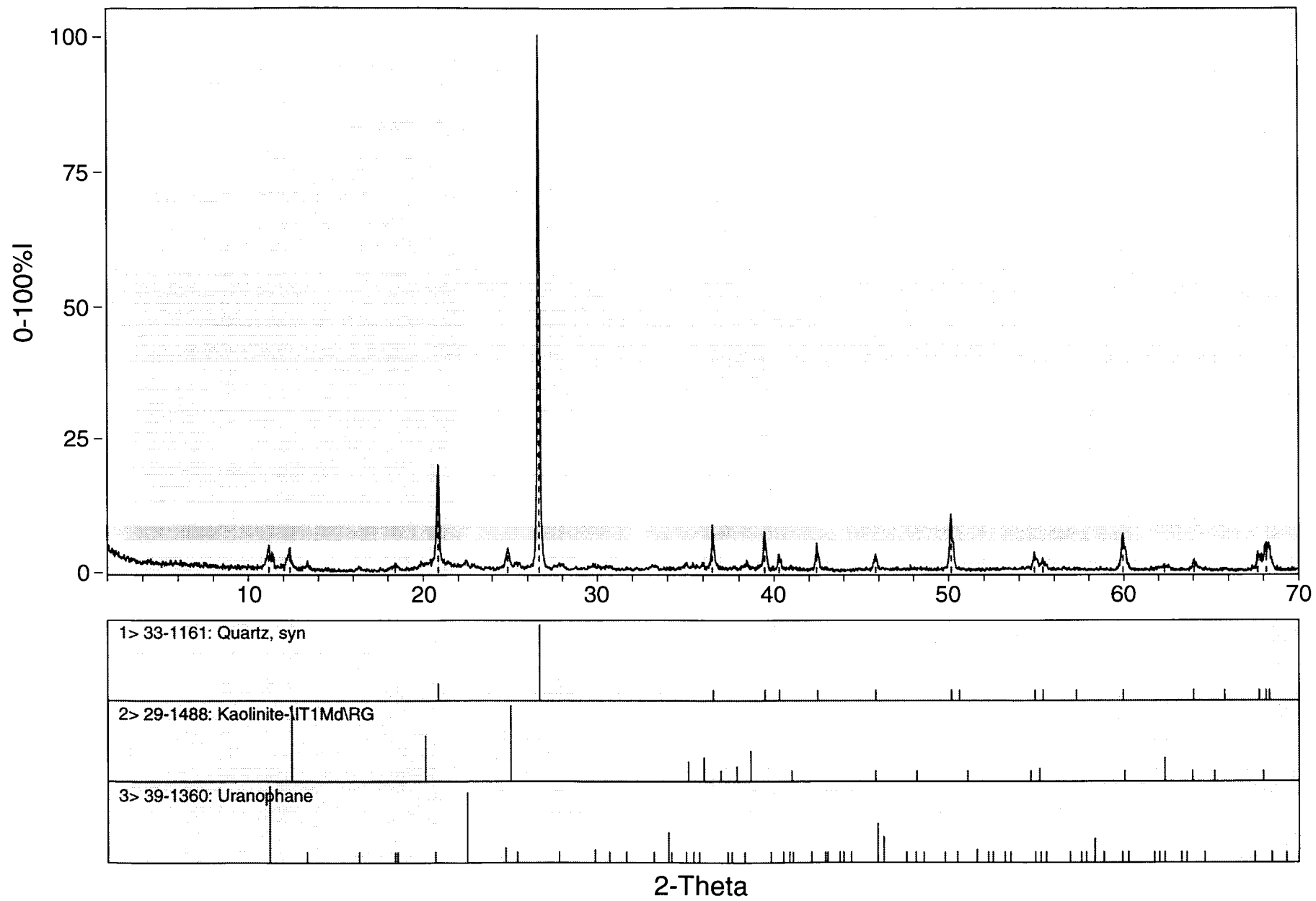


ID: 2/17/94 - NOPI-286-XRD1

File: NOPI2861.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Tue Feb 22 1994 @9:47am

File: NOPI2861.MDI> 2/17/94 - NOPI-286-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598          || Filter length(pts)  = 25
Scan Range = 2 - 70              || Noise level(sigmas) = 3.0
Step Size  = .02                 || Intensity cutoff(%) = 2.0-100
Count Time = 1 sec.              || 2-Theta Zero (deg)  = 0
-----

```

Peak-Position Centroid-Position Peak & Area are without Bkgrd										
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.178	7.9095	11.194	7.8981	11	67	4.6	919	7.4	0.247
2:	12.378	7.1452	12.341	7.1667	10	60	4.1	695	5.6	0.208
3:	18.405	4.8167	18.410	4.8153	6	21	1.4	261	2.1	0.224
4:	20.865	4.2540	20.850	4.2569	12	287	19.7	3355	27.0	0.210
5:	24.849	3.5802	24.854	3.5795	10	58	4.0	692	5.6	0.215
6:	26.650	3.3423	26.643	3.3431	11	1460	100.0	12423	100.0	0.153
7:	36.519	2.4585	36.540	2.4571	9	124	8.5	956	7.7	0.139
8:	39.461	2.2817	39.475	2.2809	9	104	7.1	951	7.7	0.165
9:	40.281	2.2371	40.290	2.2367	8	42	2.9	337	2.7	0.144
10:	42.442	2.1281	42.457	2.1274	6	76	5.2	684	5.5	0.162
11:	45.823	1.9786	45.815	1.9790	6	44	3.0	468	3.8	0.191
12:	50.148	1.8177	50.161	1.8172	6	154	10.5	1680	13.5	0.196
13:	54.852	1.6724	54.874	1.6718	7	57	3.9	537	4.3	0.170
14:	55.350	1.6585	55.339	1.6588	8	33	2.3	421	3.4	0.230
15:	59.955	1.5417	59.977	1.5411	6	106	7.3	1341	10.8	0.228
16:	62.357	1.4879	62.367	1.4877	6	18	1.2	281	2.3	0.281
17:	64.039	1.4528	64.049	1.4526	5	33	2.3	311	2.5	0.170
18:	67.682	1.3832	67.743	1.3821	4	53	3.6	1038	8.4	0.353
19:	68.161	1.3747	68.180	1.3743	5	77	5.3	2051	16.5	0.479

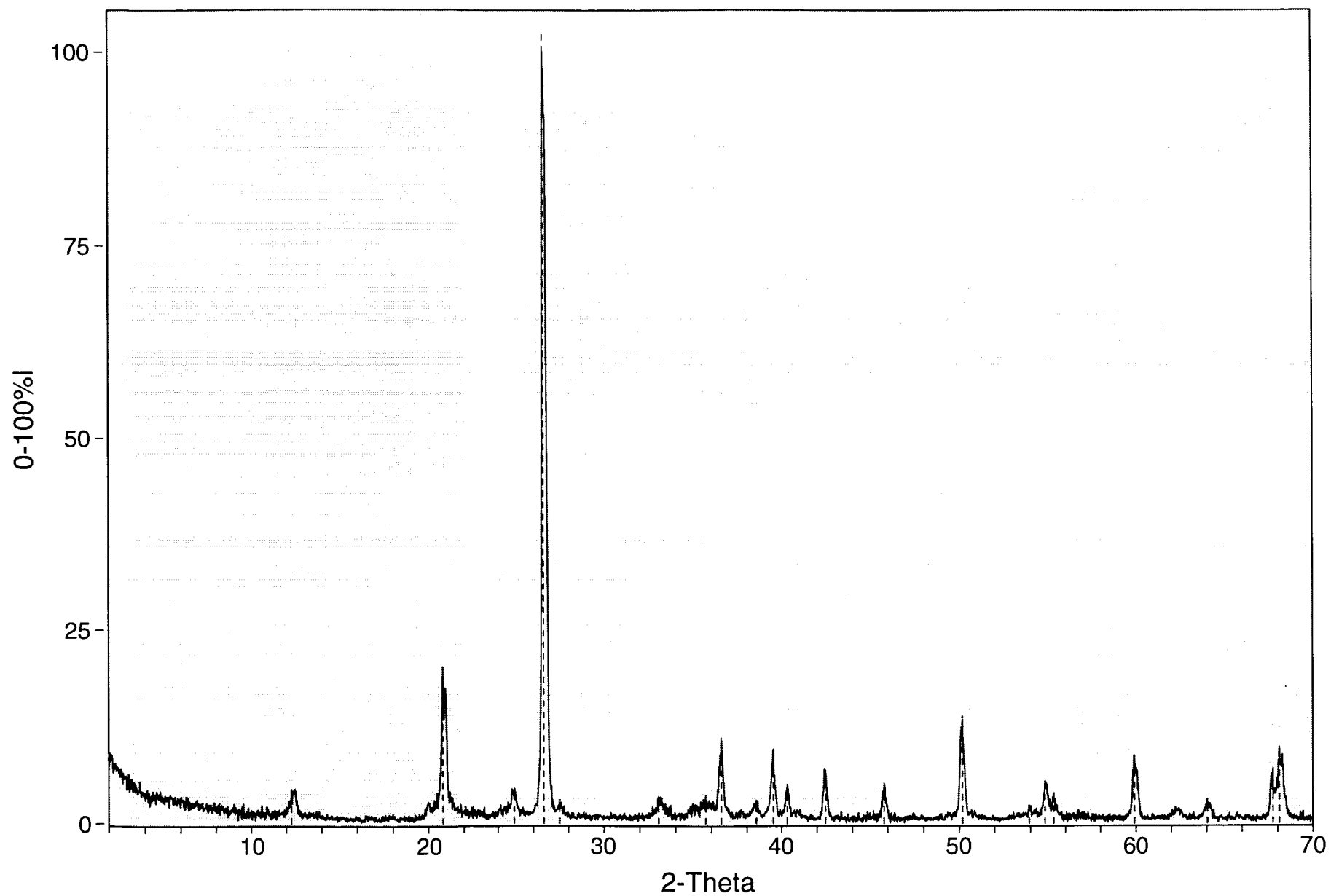
* Intensity values are based on counts per second.

ID: 2/17/94 - NOPI-287-XRD1

File: NOPI2871.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

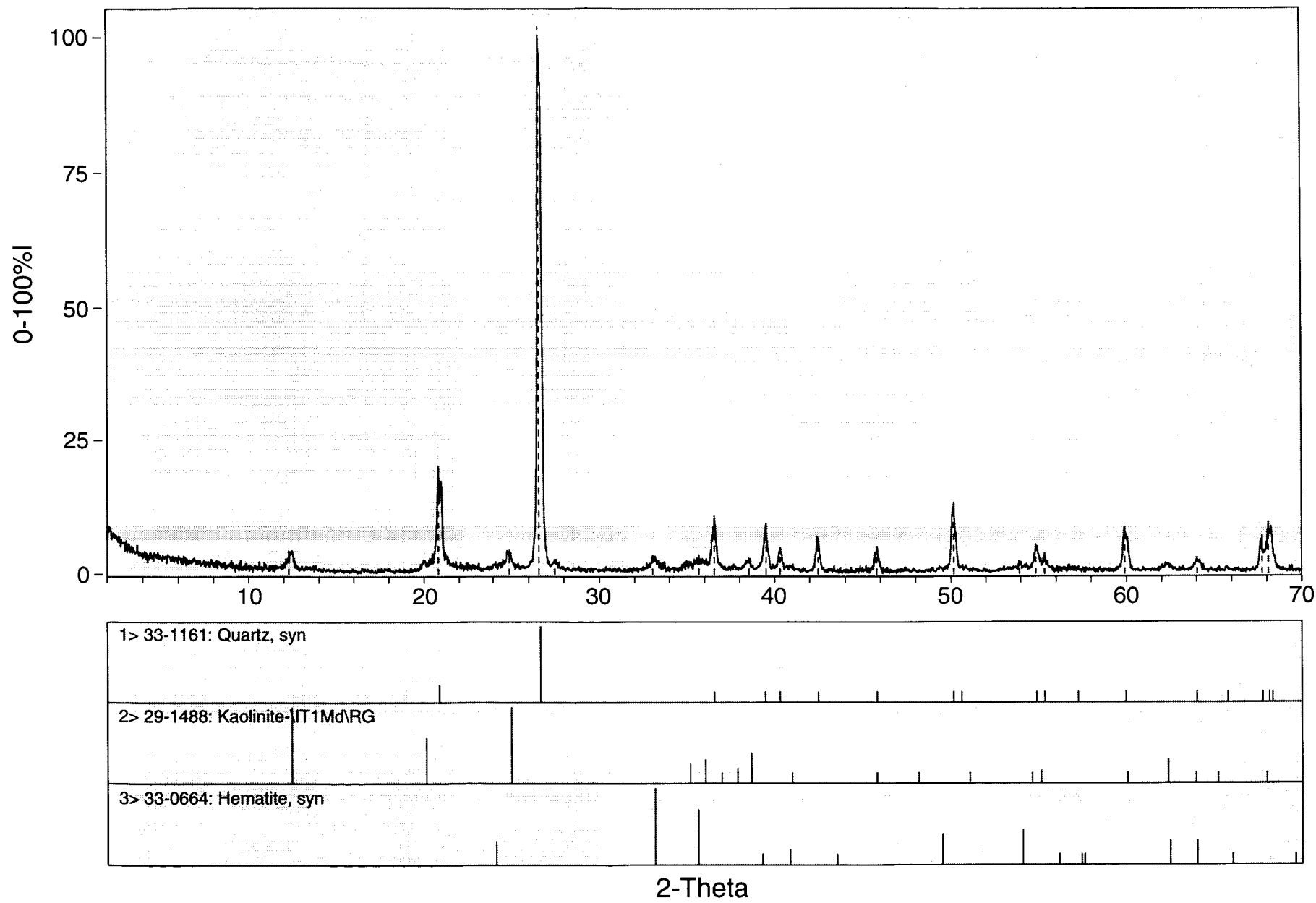


ID: 2/17/94 - NOPI-287-XRD1

File: NOPI2871.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Tue Feb 22 1994 @9:50am

File: NOPI2871.MDI> 2/17/94 - NOPI-287-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

----- Peak-Position Centroid-Position Peak & Area are without Bkgrd -----

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.279	7.2026	12.323	7.1766	9	36	3.7	487	4.9	0.243
2:	20.824	4.2622	20.866	4.2538	8	191	19.5	3468	35.2	0.327
3:	24.913	3.5712	24.897	3.5735	9	36	3.7	527	5.3	0.263
4:	26.593	3.3493	26.592	3.3494	9	981	100.0	9856	100.0	0.181
5:	27.491	3.2418	27.493	3.2416	8	27	2.8	229	2.3	0.153
6:	33.044	2.7087	33.080	2.7058	6	29	3.0	567	5.8	0.352
7:	35.675	2.5147	35.680	2.5144	7	31	3.2	1187	12.0	0.689
8:	36.574	2.4549	36.553	2.4563	8	104	10.6	1416	14.4	0.245
9:	38.531	2.3346	38.522	2.3351	8	24	2.4	233	2.4	0.175
10:	39.509	2.2790	39.491	2.2800	8	89	9.1	1079	10.9	0.218
11:	40.309	2.2356	40.309	2.2357	7	47	4.8	498	5.1	0.191
12:	42.484	2.1261	42.467	2.1269	5	65	6.6	775	7.9	0.215
13:	45.799	1.9796	45.802	1.9795	4	46	4.7	585	5.9	0.229
14:	50.171	1.8169	50.164	1.8171	4	134	13.7	2014	20.4	0.271
15:	53.928	1.6988	53.942	1.6984	4	22	2.2	365	3.7	0.299
16:	54.846	1.6725	54.875	1.6717	6	49	5.0	703	7.1	0.258
17:	55.344	1.6587	55.321	1.6593	6	33	3.4	502	5.1	0.274
18:	59.897	1.5430	59.936	1.5421	5	82	8.4	1270	12.9	0.279
19:	64.030	1.4530	64.048	1.4526	4	31	3.2	418	4.2	0.243
20:	67.740	1.3822	67.781	1.3814	4	68	6.9	1248	12.7	0.330
21:	68.103	1.3757	68.122	1.3753	4	92	9.4	2501	25.4	0.489

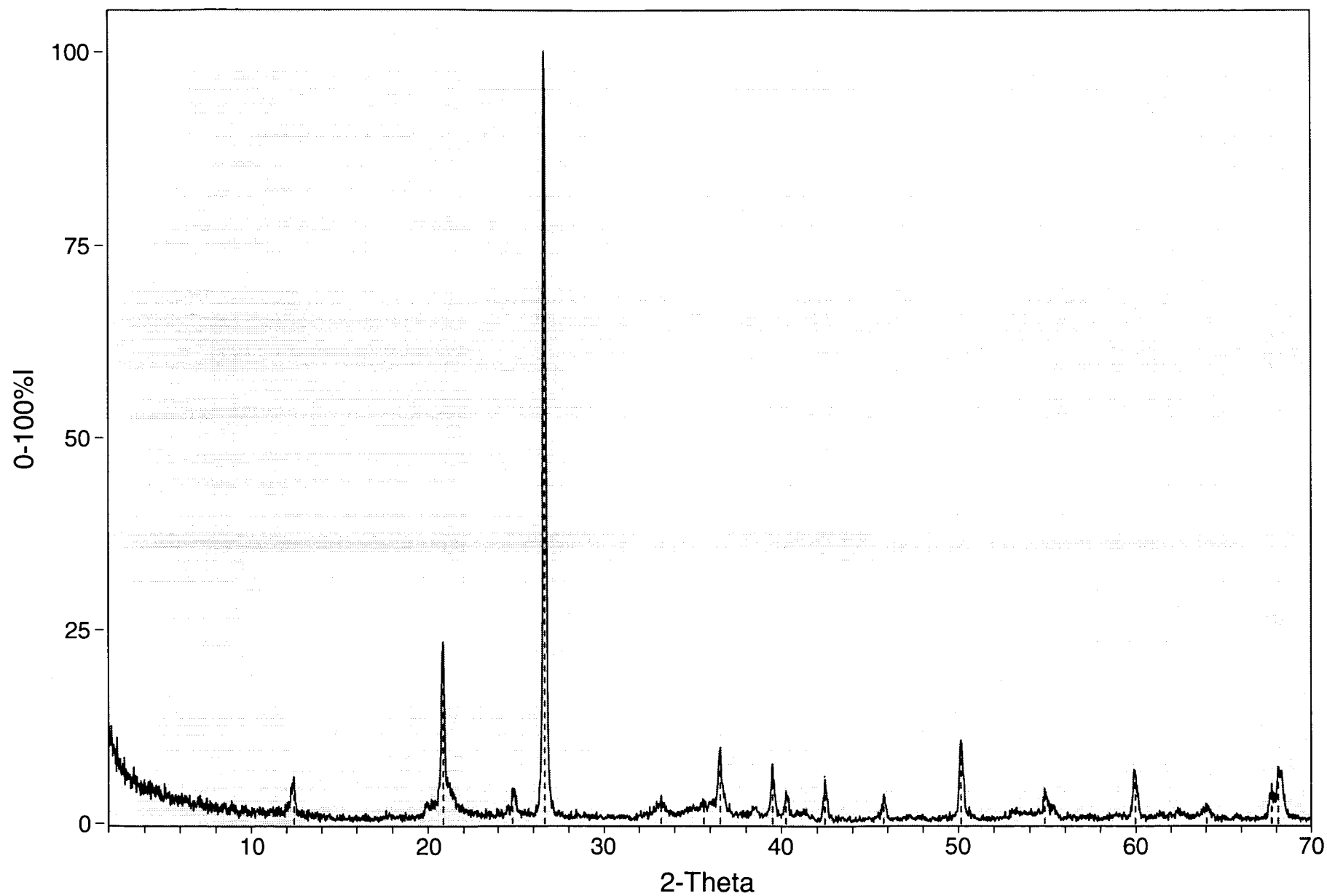
* Intensity values are based on counts per second.

ID: 2/17/94 - NOPI-288-XRD1

File: NOPI2881.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

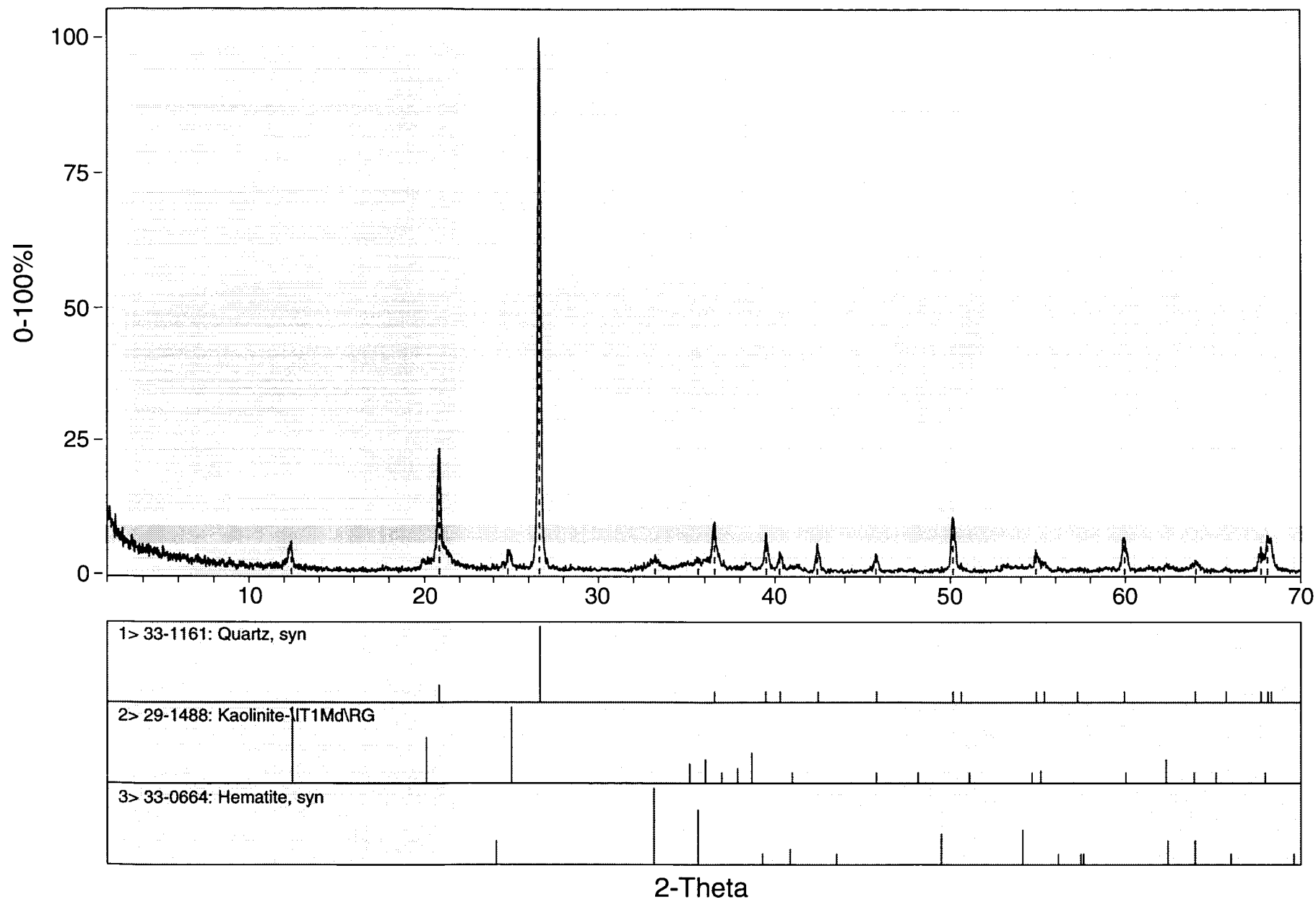


ID: 2/17/94 - NOPI-288-XRD1

File: NOPI2881.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Tue Feb 22 1994 @9:52am

File: NOPI2881.MDI> 2/17/94 - NOPI-288-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

----- Peak-Position Centroid-Position Peak & Area are without Bkgrd -----

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.413	7.1251	12.388	7.1395	9	46	5.4	441	4.6	0.173
2:	20.873	4.2524	20.867	4.2536	8	196	22.8	3425	35.8	0.315
3:	24.798	3.5876	24.823	3.5839	8	34	4.0	310	3.2	0.164
4:	26.634	3.3442	26.643	3.3431	8	859	100.0	9554	100.0	0.200
5:	33.232	2.6938	33.223	2.6945	8	27	3.1	336	3.5	0.224
6:	35.631	2.5177	35.623	2.5182	9	23	2.7	220	2.3	0.172
7:	36.571	2.4551	36.566	2.4555	10	80	9.3	1174	12.3	0.264
8:	39.492	2.2800	39.497	2.2797	8	62	7.2	652	6.8	0.189
9:	40.254	2.2386	40.269	2.2378	8	33	3.8	274	2.9	0.149
10:	42.432	2.1286	42.446	2.1279	3	57	6.6	518	5.4	0.164
11:	45.771	1.9808	45.778	1.9805	3	30	3.5	383	4.0	0.230
12:	50.150	1.8176	50.164	1.8171	3	92	10.7	1380	14.4	0.270
13:	54.851	1.6724	54.875	1.6717	5	38	4.4	393	4.1	0.186
14:	59.967	1.5414	59.959	1.5416	5	57	6.6	834	8.7	0.263
15:	64.048	1.4526	64.036	1.4529	5	18	2.1	293	3.1	0.293
16:	67.747	1.3821	67.789	1.3813	4	44	5.1	676	7.1	0.277
17:	68.108	1.3756	68.141	1.3750	4	62	7.2	1717	18.0	0.498

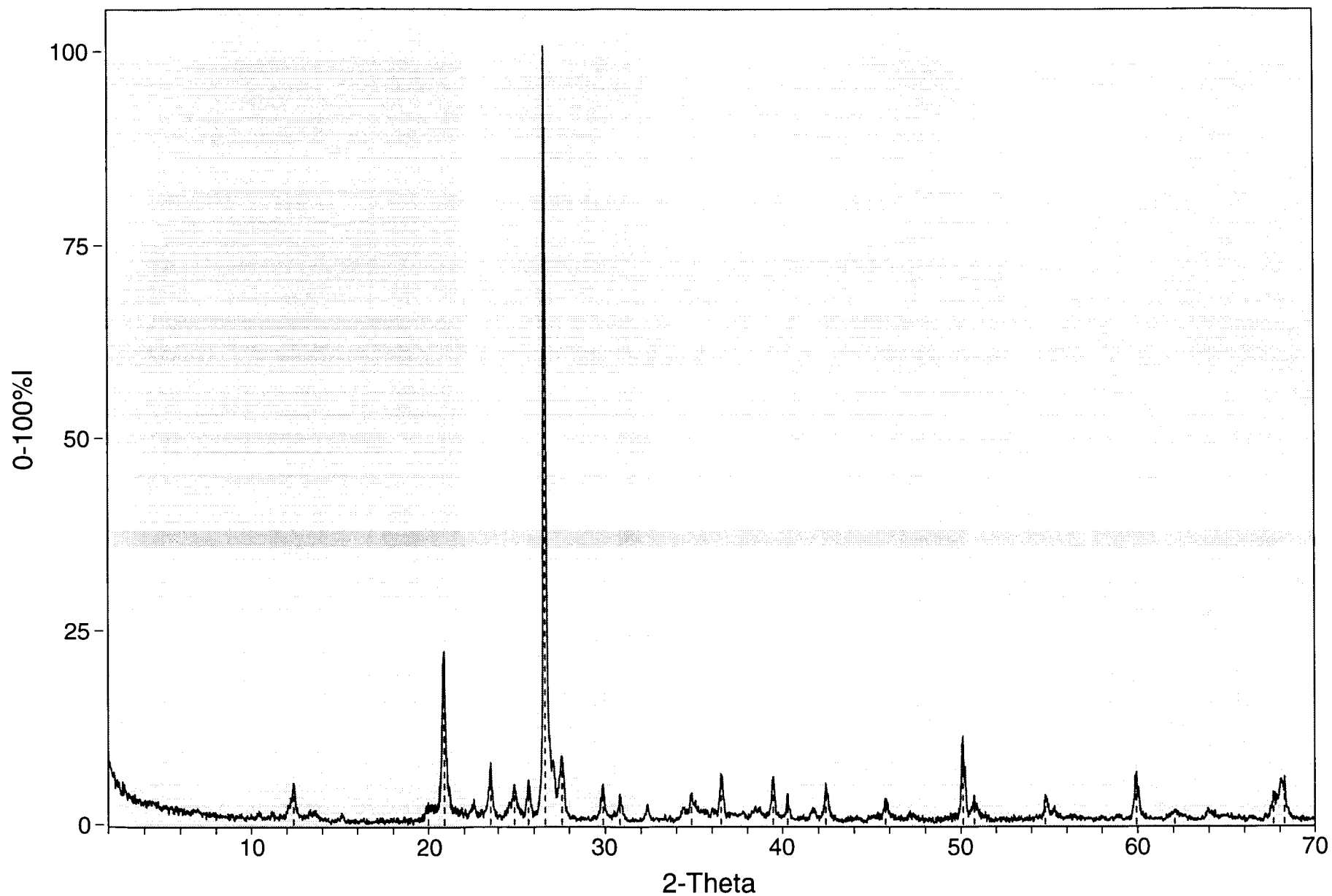
* Intensity values are based on counts per second.

ID: 2/18/94 - NOPI-289-XRD1

File: NOPI2891.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

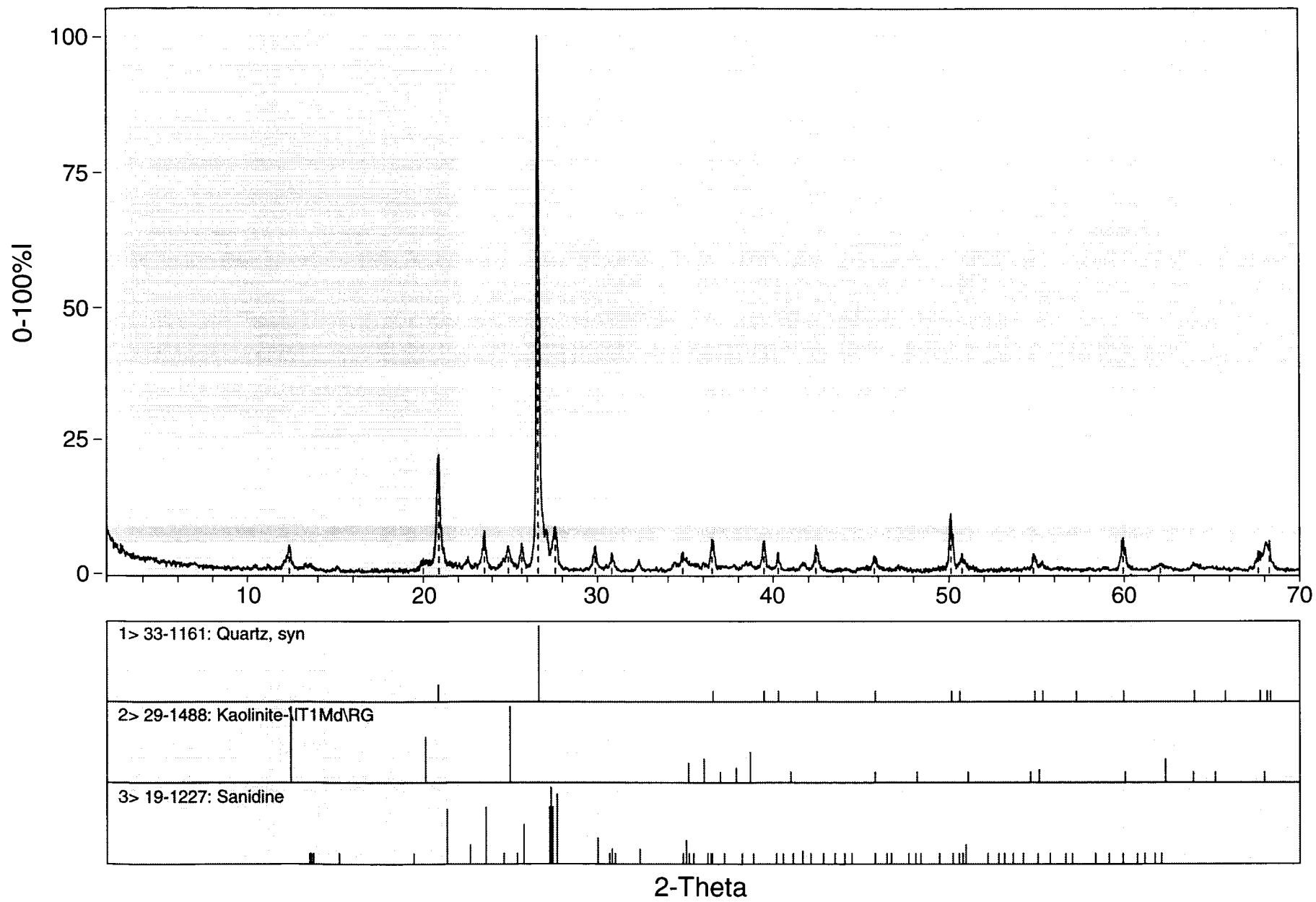


ID: 2/18/94 - NOPI-289-XRD1

File: NOPI2891.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2891.MDI> 2/18/94 - NOPI-289-XRD1

```
----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598           || Filter length(pts)  = 25
Scan Range = 2 - 70                || Noise level(sigmas) = 3.0
Step Size  = .02                   || Intensity cutoff(%) = 2.0-100
Count Time = 1 sec.                || 2-Theta Zero (deg)  = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.384	7.1416	12.359	7.1562	9	61	4.6	984	7.1	0.290
2:	19.999	4.4362	20.027	4.4300	10	28	2.1	415	3.0	0.267
3:	20.898	4.2474	20.887	4.2496	10	285	21.7	4261	30.7	0.269
4:	23.576	3.7706	23.560	3.7731	12	95	7.2	1042	7.5	0.197
5:	24.916	3.5708	24.905	3.5723	14	56	4.3	783	5.6	0.252
6:	25.696	3.4642	25.702	3.4634	16	63	4.8	595	4.3	0.170
7:	26.636	3.3440	26.648	3.3425	13	1316	100.0	13859	100.0	0.190
8:	27.594	3.2300	27.566	3.2332	11	110	8.4	1800	13.0	0.295
9:	29.872	2.9887	29.861	2.9897	7	63	4.8	781	5.6	0.223
10:	30.813	2.8995	30.817	2.8992	6	51	3.9	585	4.2	0.206
11:	34.850	2.5724	34.871	2.5708	8	47	3.6	1280	9.2	0.490
12:	36.510	2.4591	36.528	2.4579	13	80	6.1	793	5.7	0.178
13:	39.466	2.2814	39.462	2.2817	9	74	5.6	815	5.9	0.198
14:	40.286	2.2369	40.287	2.2368	11	43	3.3	320	2.3	0.134
15:	42.426	2.1289	42.449	2.1278	6	67	5.1	818	5.9	0.220
16:	45.763	1.9811	45.785	1.9802	6	39	3.0	532	3.8	0.246
17:	50.120	1.8186	50.133	1.8182	4	145	11.0	2812	20.3	0.349
18:	50.759	1.7972	50.760	1.7972	6	44	3.3	792	5.7	0.324
19:	54.798	1.6739	54.827	1.6731	8	42	3.2	426	3.1	0.183
20:	59.933	1.5422	59.938	1.5420	6	83	6.3	1162	8.4	0.252
21:	62.091	1.4936	62.093	1.4936	6	22	1.7	464	3.3	0.380
22:	67.648	1.3838	67.698	1.3829	6	59	4.5	1009	7.3	0.308
23:	68.264	1.3728	68.202	1.3739	6	79	6.0	1516	10.9	0.345

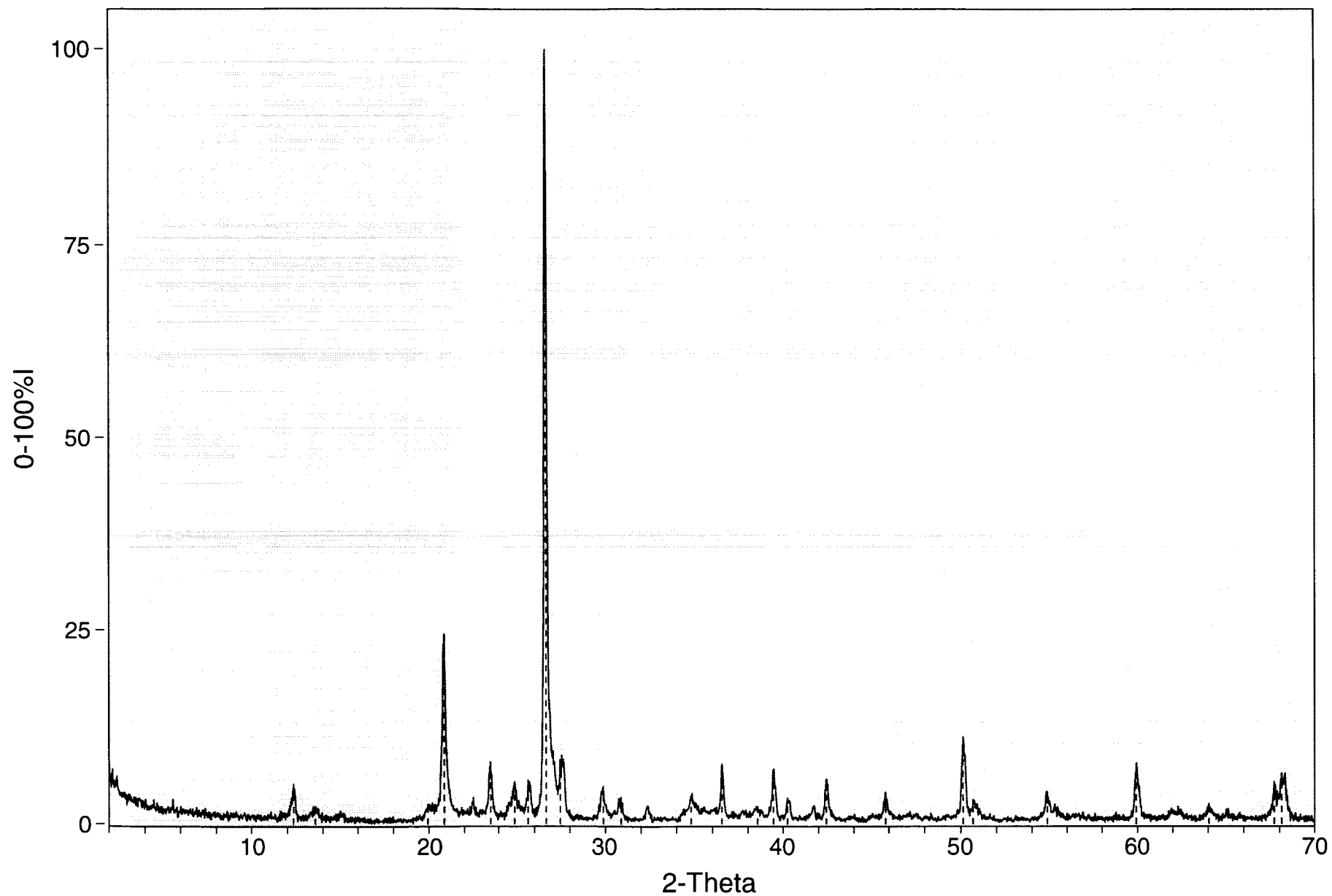
* Intensity values are based on counts per second.

ID: 2/18/94 - NOPI-290-XRD1

File: NOPI2901.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

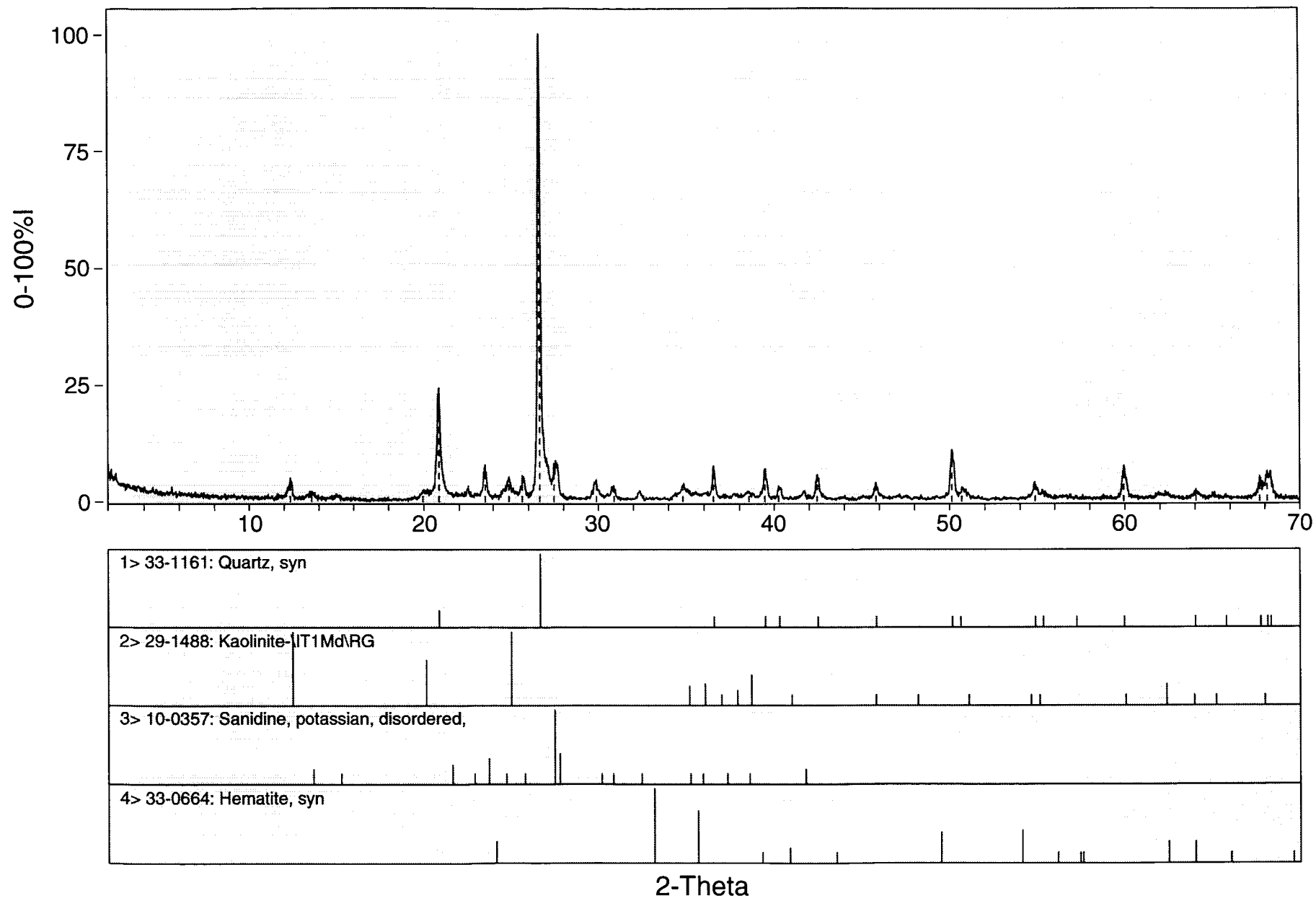


ID: 2/18/94 - NOPI-290-XRD1

File: NOPI2901.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2901.MDI> 2/18/94 - NOPI-290-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	12.339	7.1677	12.330	7.1726	8	56	4.6	625	4.5	0.201
2:	13.580	6.5151	13.578	6.5163	7	21	1.7	293	2.1	0.251
3:	19.942	4.4486	19.970	4.4426	10	22	1.8	311	2.3	0.254
4:	20.861	4.2547	20.860	4.2551	9	291	24.1	4191	30.4	0.259
5:	23.542	3.7759	23.536	3.7769	12	88	7.3	960	7.0	0.196
6:	24.883	3.5754	24.873	3.5768	13	55	4.6	918	6.6	0.300
7:	25.647	3.4707	25.669	3.4676	16	60	5.0	527	3.8	0.158
8:	26.643	3.3430	26.643	3.3431	14	1205	100.0	13808	100.0	0.206
9:	27.447	3.2469	27.468	3.2445	11	98	8.1	2710	19.6	0.498
10:	29.884	2.9875	29.865	2.9894	7	56	4.6	818	5.9	0.263
11:	30.883	2.8931	30.855	2.8957	6	38	3.2	443	3.2	0.210
12:	34.808	2.5753	34.829	2.5738	7	41	3.4	1017	7.4	0.446
13:	36.529	2.4578	36.540	2.4571	13	85	7.1	734	5.3	0.155
14:	38.547	2.3337	38.538	2.3342	9	25	2.1	346	2.5	0.249
15:	39.451	2.2823	39.463	2.2816	8	80	6.6	957	6.9	0.215
16:	40.253	2.2387	40.273	2.2376	8	38	3.2	322	2.3	0.153
17:	42.451	2.1276	42.467	2.1269	6	65	5.4	770	5.6	0.213
18:	45.812	1.9791	45.818	1.9788	5	46	3.8	709	5.1	0.277
19:	50.135	1.8181	50.161	1.8172	5	135	11.2	2016	14.6	0.269
20:	50.696	1.7993	50.721	1.7984	5	35	2.9	863	6.3	0.444
21:	54.876	1.6717	54.885	1.6714	7	49	4.1	693	5.0	0.255
22:	59.938	1.5420	59.961	1.5415	7	88	7.3	1147	8.3	0.235
23:	64.040	1.4528	64.050	1.4526	7	25	2.1	301	2.2	0.217
24:	67.701	1.3829	67.749	1.3820	7	59	4.9	1037	7.5	0.316
25:	68.122	1.3754	68.143	1.3750	7	72	6.0	2124	15.4	0.531

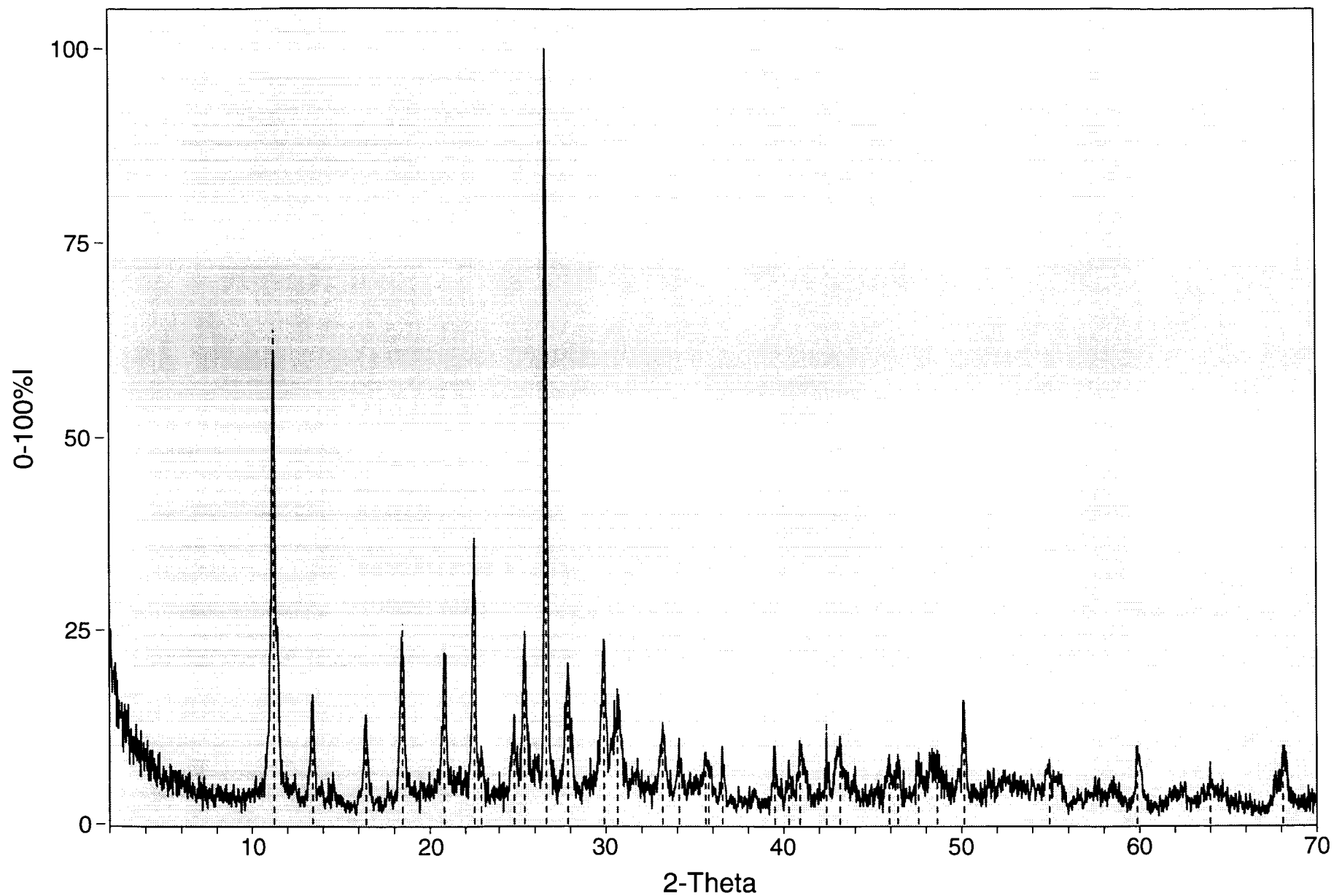
* Intensity values are based on counts per second.

ID: 2/18/94 - NOPI-291-XRD1

File: NOPI2911.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

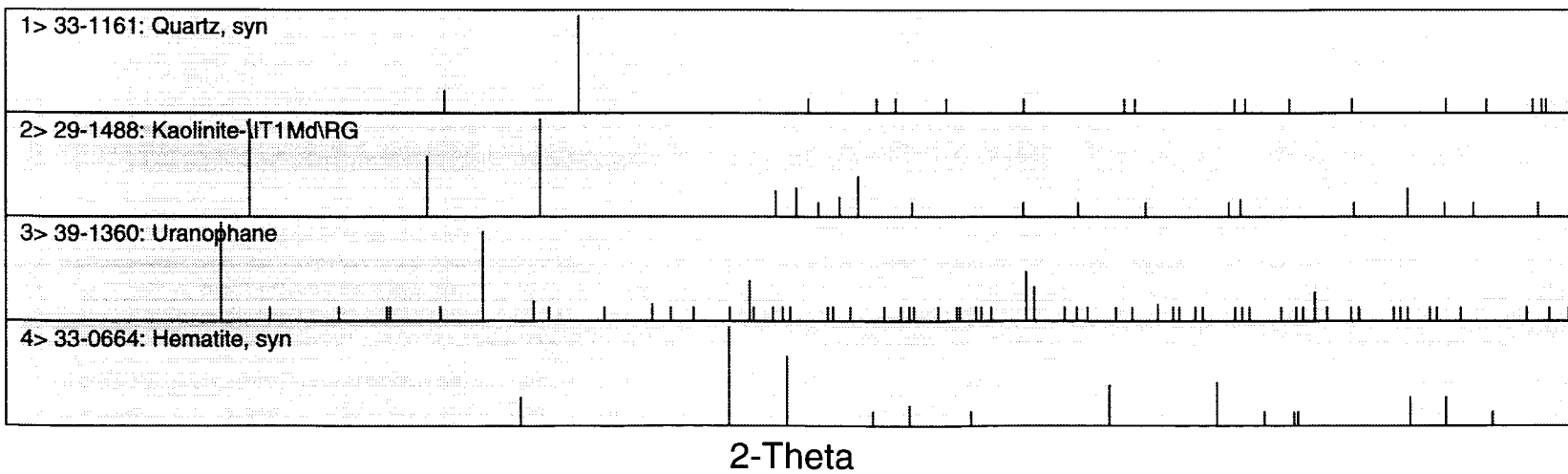
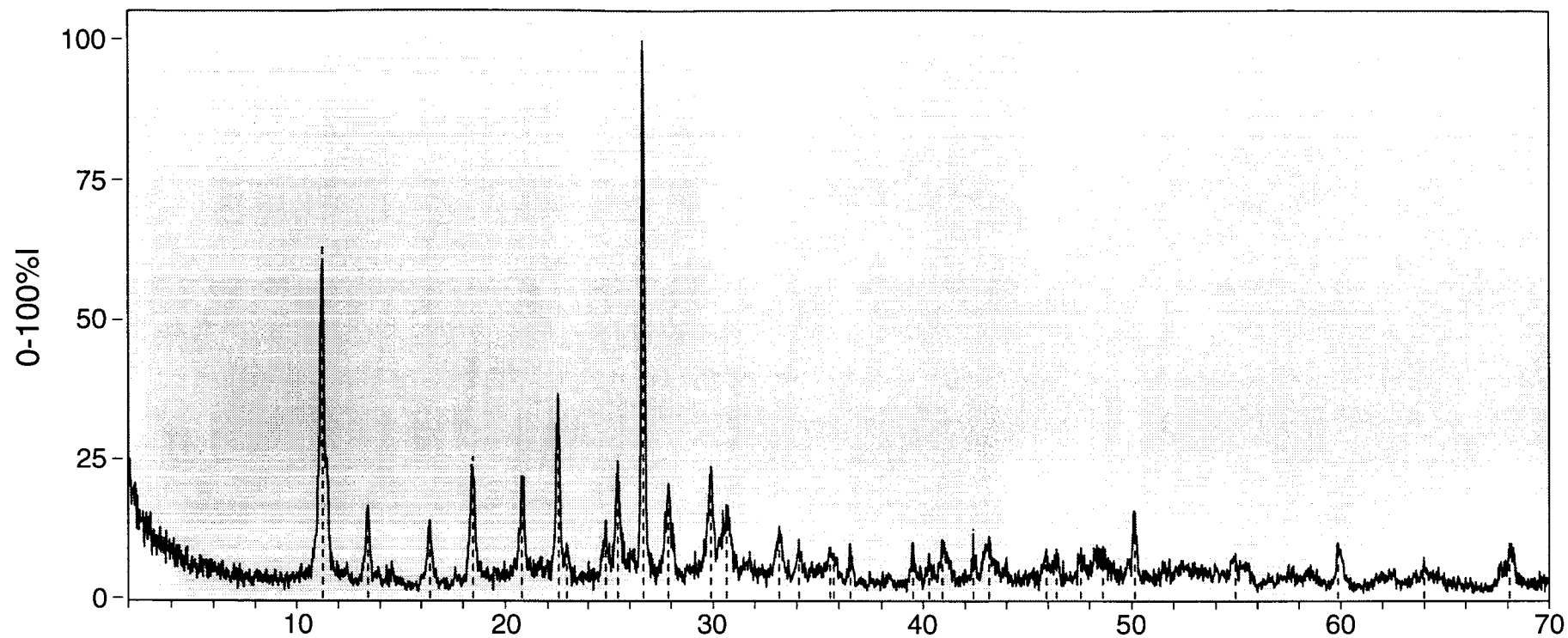


ID: 2/18/94 - NOPI-291-XRD1

File: NOPI2911.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI2911.MDI> 2/18/94 - NOPI-291-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation  = CU_1.540598          Filter length(pts) = 25
Scan Range = 2 - 70              Noise level(sigmas) = 3.0
Step Size  = .02                 Intensity cutoff(%) = 2.0-100
Count Time = 1 sec.              2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.252	7.8571	11.245	7.8626	11	241	64.8	4035	100.0	0.301
2:	13.431	6.5871	13.418	6.5935	10	56	15.1	656	16.3	0.211
3:	16.408	5.3980	16.399	5.4011	8	49	13.2	620	15.4	0.228
4:	18.467	4.8007	18.456	4.8034	10	93	25.0	1230	30.5	0.238
5:	20.806	4.2659	20.817	4.2637	15	74	19.9	893	22.1	0.217
6:	22.542	3.9412	22.519	3.9452	15	129	34.7	1548	38.4	0.216
7:	22.964	3.8697	22.965	3.8696	14	27	7.3	242	6.0	0.161
8:	24.841	3.5814	24.833	3.5825	16	39	10.5	383	9.5	0.177
9:	25.420	3.5010	25.428	3.5000	14	84	22.6	1215	30.1	0.260
10:	26.640	3.3434	26.647	3.3426	19	372	100.0	3594	89.1	0.174
11:	27.858	3.2000	27.860	3.1997	15	66	17.7	1093	27.1	0.298
12:	29.896	2.9863	29.883	2.9876	15	78	21.0	1556	38.6	0.359
13:	30.656	2.9140	30.650	2.9146	16	55	14.8	1053	26.1	0.345
14:	33.174	2.6984	33.173	2.6984	14	39	10.5	551	13.7	0.254
15:	34.093	2.6277	34.096	2.6275	14	31	8.3	240	5.9	0.139
16:	35.592	2.5204	35.600	2.5198	11	26	7.0	315	7.8	0.218
17:	35.751	2.5096	35.720	2.5117	11	22	5.9	438	10.9	0.358
18:	36.532	2.4577	36.541	2.4571	9	31	8.3	233	5.8	0.135
19:	39.507	2.2792	39.501	2.2795	9	34	9.1	270	6.7	0.143
20:	40.287	2.2368	40.292	2.2366	9	24	6.5	216	5.4	0.162
21:	40.908	2.2043	40.929	2.2032	10	33	8.9	396	9.8	0.216
22:	42.407	2.1297	42.413	2.1295	11	42	11.3	184	4.6	0.079
23:	43.163	2.0942	43.137	2.0954	11	34	9.1	713	17.7	0.377
24:	45.921	1.9746	45.912	1.9750	11	24	6.5	233	5.8	0.175
25:	46.403	1.9553	46.399	1.9554	12	24	6.5	188	4.7	0.141
26:	47.579	1.9096	47.580	1.9096	13	23	6.2	207	5.1	0.162
27:	48.640	1.8704	48.633	1.8707	13	24	6.5	271	6.7	0.203
28:	50.137	1.8180	50.131	1.8182	13	49	13.2	532	13.2	0.195
29:	54.949	1.6696	54.942	1.6698	13	23	6.2	114	2.8	0.089
30:	59.871	1.5436	59.893	1.5431	7	36	9.7	420	10.4	0.210
31:	63.986	1.4539	63.993	1.4538	8	25	6.7	182	4.5	0.131
32:	68.103	1.3757	68.122	1.3754	6	34	9.1	690	17.1	0.365

* Intensity values are based on counts per second.

SH

Jade: Hit List from Search/Match

NOPI2911.MDI> 2/18/94 - NOPI-291-XRD1

Hits Sorted on Figure-Of-Merit		QM*	PDF-#	FOM	I%	OFF	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	Quartz, syn - SiO2	+	33-1161	0.8	83	0.00	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2>	Graphite-3\ITR\RG, syn [NR] - C	+	26-1079	2.0	51	0.00		R3 (146)	2.46	2.46	10.04	17	6	2.281
3>	Chapmanite - Fe2SbSi2O8(OH)		11- 135	3.0	7	0.06		Am (8)	7.70	8.99	5.19	177	2	4.088
4>	Paraalumohydrocalcite - CaAl2(CO		30- 222	3.1	23	0.18								1.999
5>	Hydrotalcite - Mg6Al2(CO3)(OH)16	?	41-1428	3.1	28	-0.12		R-3m (166)	6.15	6.15	46.50	508	3	1.975
6>	Wollastonite-2\ITM\RG - CaSiO3	+	27- 88	3.4	18	-0.06		P21/a (14)	15.43	7.32	7.07	794	12	2.914
7>	Diopside - Ca(Mg,Al)(Si,Al)2O6	+	41-1370	3.4	16	0.06	0.8	I2/a (15)	9.72	8.87	5.28	219	4	3.291
8>	Liselite - Na2CaAl4Si4O16		39- 386	3.7	16	-0.06		P21ab (29)	9.65	17.09	8.26	1362	4	2.741
9>	Unnamed mineral, syn [NR] - (Fe,	?	18- 877	3.7	51	-0.06		P4132 (213)	7.17	7.17	7.17	369	4	6.087
10>	Smirnite - Bi2TeO5	+	38- 420	3.8	4	0.00		Abm2 (39)	11.58	16.45	5.51	525	8	7.889
11>	Carbonatehydroxylapatite, fluori	+	21- 145	3.8	4	0.06		P63/m (176)	9.41	9.41	6.87	527	1	3.061
12>	Epsomite, syn - MgSO4.7H2O	+	36- 419	3.8	17	-0.18		P212121 (19)	11.87	11.98	6.85	974	4	1.681
13>	Aegirine, syn - NaFe(SiO3)2	+	34- 185	4.0	18	0.00		I2/a (15)	9.53	8.81	5.29	215	4	3.576
14>	Pettedunnite, syn - CaZnSi2O6	+	40- 495	4.0	10	0.06		I2/a (15)	9.78	8.98	5.24	222	4	3.854
15>	Romarchite, syn - SnO	+	6- 395	4.1	14	0.00		P4/nmm (129)	3.80	3.80	4.84	70	2	6.399
16>	Moschelite, syn - HgI	+	6- 245	4.1	13	0.00		I4/mmm (139)	4.93	4.93	11.63	142	4	7.684
17>	Augite, aluminian - Ca(Mg,Fe+3,A	+	41-1483	4.1	10	-0.06	0.6	I2/a (15)	9.71	8.89	5.27	219	4	3.298
18>	Metavariscite - AlPO4.2H2O	+	33- 32	4.2	16	-0.06		P21/n (14)	8.45	9.51	5.18	417	4	2.519
19>	Variscite-2\ITO\RG - AlPO4.2H2O	?	25- 18	4.3	17	0.18		Pbca (61)	9.90	17.18	9.66	1643	16	2.555
20>	Clinopyroxene, titanian, alumini		25- 306	4.4	12	0.06		C2/c (15)	9.80	8.85	5.36	224	4	
21>	Mangaholangbeinite, syn - K2Mn2(	+	20- 909	4.4	15	0.06	3.1	P213 (198)	10.11	10.11	10.11	1035	4	3.058
22>	Koritnigite - Zn(AsO3)(OH).H2O	+	34-1396	4.5	12	-0.18		P-1 (2)	7.95	15.83	6.67	833	8	3.560
23>	Krautite, syn - MnH(AsO4).H2O	+	33- 895	4.5	19	0.00	3.3	P21 (4)	8.01	15.96	6.80	864	8	3.274
24>	Annabergite, magnesian - (Ni,Mg)	+	35- 568	4.5	12	0.18		I2/m (12)	10.08	13.34	4.73	311	2	3.110
25>	Connellite - Cu19Cl4(SO4)(OH)32!	+	35- 538	4.5	21	0.18	2.7	P-62c (190)	15.78	15.78	9.10	1962	2	3.458
26>	Braitschite-(Ce) - (Ca,Na2)7(Ce,		21- 158	4.6	7	0.00		P ()	12.16	12.16	7.38	944	1	2.903
27>	Pyroxmangite, syn - MnSiO3	+	29- 895	4.7	16	-0.12		P-1 (2)	7.60	15.97	6.72	807	14	3.772
28>	Natrite - Na2CO3		37- 451	4.7	16	-0.18			8.91	5.24	6.05	276	4	2.546
29>	Spiroffite, syn - Mn2Te3O8	+	24- 740	4.7	10	0.00		C2/c (15)	12.87	5.39	11.88	408	4	5.053
30>	Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	4.7	26	0.06		P21/* (11)	8.98	6.73	5.15	311	2	2.977
31>	Fluellite - Al2(PO4)F2(OH).7H2O	+	37- 450	4.7	12	-0.12		Fddd (70)	11.26	21.19	8.57	511	8	2.145
32>	Parwelite - (Mn,Mg,Ca)5SbAsSiO12	+	29- 346	4.8	10	0.06		Aa (9)	10.05	19.42	9.73	945	8	4.620
33>	Junoite - Pb3Cu2Bi8(S,Se)16	+	42- 567	4.8	7	0.00		I2/m (12)	21.17	4.06	17.17	737	2	7.242
34>	Nordstrandite, syn - Al(OH)3	+	24- 6	4.8	17	0.00		P1 (1)	5.08	5.13	4.98	106	2	2.441
35>	Huemulite - Na4MgV10O28.24H2O	+	18-1225	4.8	17	-0.12		P-1 (2)	11.77	11.84	9.02	1040	1	2.404
36>	Aristarainite - Na2MgBi2O20.8H2O	+	26-1379	4.8	18	0.00		P21/a (14)	18.87	7.53	7.81	1100	2	2.006
37>	Liroconite - Cu2Al(As,P)O4(OH)4!	+	12- 526	4.8	13	-0.12		I2/a (15)	12.66	7.57	9.90	475	4	2.960
38>	Ferrosilite, magnesian - (Fe,Mg)	+	31- 634	4.8	7	0.06		Pcab (61)	8.92	18.33	5.22	852	16	3.630
39>	Moissanite-15\ITR\RG, syn - SiC	+	39-1196	4.9	4	0.00		R3m (160)	3.07	3.07	37.70	103	15	3.239
40>	Sj\PIogrenite - Mg6Fe2CO3(OH)16!	+	24-1091	4.9	50	-0.06		P63/mmc (194)	3.11	3.11	15.61	131		2.097

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.
 * vol - reduced-cell volume; dx - measured density if calculated is not available.

Current S/M parameters:

PDF Subfile to Search	MINERALS	2-Theta Error Window	.18
Chemistry Filter	NF,CHM (No)	Sensitivity to Matching Intensity	5
Search Focus on	Major Phase(s)	Sensitivity to Matching 2-Theta	5
Preferred Orientation in Sample	No	Maximum Number of Hits to Save	40
Search only High Quality Phases	No	Rubber-Ruler Search - %Elasticity	0
Exclude Questionable Phases	No	Required 100% Line in Srchd Range ...	No

Jade: Hit List from Search/Match

NOPI2911.MDI> 2/18/94 - NOPI-291-XRD1

Patterns Sorted on Figure-Of-Merit	QM*	PDF-#	FOM	I%	OFF	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1> Quartz, syn - SiO2	+	33-1161	0.8	83	0.00	3.6	P3221 (154)	4.91	4.91	5.41	113	3	2.649
2> Graphite-3\ITR\RG, syn [NR] - C	+	26-1079	1.7	51	0.00		R3 (146)	2.46	2.46	10.04	17	6	2.281
3> Uranophane - Ca(UO2)2(SiO3OH)2!5	+	39-1360	2.1	39	0.00		P21 (4)	15.92	7.01	6.67	739	2	3.849
4> Chapmanite - Fe2SbSi2O8(OH)	+	11-135	3.0	7	0.06		Am (8)	7.70	8.99	5.19	177	2	4.088
5> Paraalumohydrocalcite - CaAl2(CO3)2	?	30-222	3.1	23	0.18								1.999
6> Hydrotalcite - Mg6Al2(CO3)(OH)16	?	41-1428	3.1	28	-0.12		R-3m (166)	6.15	6.15	46.50	508	3	1.975
7> Wollastonite-2\ITM\RG - CaSiO3	+	27-88	3.4	18	-0.06		P21/a (14)	15.43	7.32	7.07	794	12	2.914
8> Diopside - Ca(Mg,Al)(Si,Al)2O6	+	41-1370	3.4	16	0.06	0.8	I2/a (15)	9.72	8.87	5.28	219	4	3.291
9> Aegirine, syn - NaFe(SiO3)2	+	34-185	3.4	18	0.00		I2/a (15)	9.53	8.81	5.29	215	4	3.576
10> Natrite - Na2CO3	+	37-451	3.5	16	-0.18			8.91	5.24	6.05	276	4	2.546
11> Unnamed mineral, syn [NR] - (Fe,	?	18-877	3.7	51	-0.06		P4132 (213)	7.17	7.17	7.17	369	4	6.087
12> Lisetite - Na2CaAl4Si4O16	+	39-386	3.7	16	-0.06		P21ab (29)	9.65	17.09	8.26	1362	4	2.741
13> Carbonatehydroxylapatite, fluori	+	21-145	3.8	4	0.06		P63/m (176)	9.41	9.41	6.87	527	1	3.061
14> Epsomite, syn - MgSO4!7H2O	+	36-419	3.8	17	-0.18		P212121 (19)	11.87	11.98	6.85	974	4	1.681
15> Smirnite - Bi2TeO5	+	38-420	3.8	4	0.00		Abm2 (39)	11.58	16.45	5.51	525	8	7.889
16> Moganite [NR] - SiO2	+	38-360	3.8	54	0.00		I ()	8.53	10.76	4.93	226	12	2.645
17> Petedunnite, syn - CaZnSi2O6	+	40-495	4.0	10	0.06		I2/a (15)	9.78	8.98	5.24	222	4	3.854
18> Augite, aluminian - Ca(Mg,Fe+3,A	+	41-1483	4.1	10	-0.06	0.6	I2/a (15)	9.71	8.89	5.27	219	4	3.298
19> Moschelite, syn - HgI	+	6-245	4.1	13	0.00		I4/mmm (139)	4.93	4.93	11.63	142	4	7.684
20> Romarchite, syn - SnO	+	6-395	4.1	14	0.00		P4/nmm (129)	3.80	3.80	4.84	70	2	6.399
21> Metavariscite - AlPO4!2H2O	+	33-32	4.2	16	-0.06		P21/n (14)	8.45	9.51	5.18	417	4	2.519
22> Variscite-2\ITO\RG - AlPO4!2H2O	?	25-18	4.3	17	0.18		Pbca (61)	9.90	17.18	9.66	1643	16	2.555
23> Wollastonite-1\ITA\RG - CaSiO3	+	42-547	4.3	16	-0.06	1.0	P-1 (2)	7.30	7.90	7.05	394	6	2.937
24> Hohmannite - Fe2(OH)2(SO4)2!7H2O	+	17-155	4.4	34	0.00		P-1 (2)	9.05	10.88	7.17	675	2	2.282
25> Wollastonite-2\ITM\RG - CaSiO3	+	43-1460	4.4	14	0.00		P21/a (14)	15.43	7.32	7.07	795	12	2.910
26> Manganolangbeinite, syn - K2Mn2	+	20-909	4.4	15	0.06	3.1	P213 (198)	10.11	10.11	10.11	1035	4	3.058
27> Clinopyroxene, titanian, alumin	+	25-306	4.4	12	0.06		C2/c (15)	9.80	8.85	5.36	224	4	
28> Koritnigite - Zn(AsO3)(OH)!H2O	+	34-1396	4.5	12	-0.18		P-1 (2)	7.95	15.83	6.67	833	8	3.560
29> Connellite - Cu9Cl4(SO4)(OH)32!	+	35-538	4.5	21	0.18	2.7	P-62c (190)	15.78	15.78	9.10	1962	2	3.458
30> Krautite, syn - MnH(AsO4)!H2O	+	33-895	4.5	19	0.00	3.3	P21 (4)	8.01	15.96	6.80	864	8	3.274
31> Annabergite, magnesian - (Ni,Mg)	+	35-568	4.5	12	0.18		I2/m (12)	10.08	13.34	4.73	311	2	3.110
32> Arcanite, syn - K2SO4	+	5-613	4.5	8	0.00	1.8	Pnam (62)	7.48	10.07	5.77	435	4	2.661
33> Misenite - K8(SO4)(SO3OH)6	?	41-1363	4.5	17	-0.06			22.74	7.10	8.71	1389		2.320
34> Braitschite-(Ce) - (Ca,Na)7(Ce,	+	21-158	4.6	7	0.00		P ()	12.16	12.16	7.38	944	1	2.903
35> Fluellite - Al2(PO4)F2(OH)!7H2O	+	37-450	4.7	12	-0.12		Fddd (70)	11.26	21.19	8.57	511	8	2.145
36> Sidorenkite - Na3Mn(PO4)(CO3)	+	33-1266	4.7	26	0.06		P21/* (11)	8.98	6.73	5.15	311	2	2.977
37> Spiroffite, syn - Mn2Fe3O8	+	24-740	4.7	10	0.00		C2/c (15)	12.87	5.39	11.88	408	4	5.053
38> Pyroxmangite, syn - MnSiO3	+	29-895	4.7	16	-0.12		P-1 (2)	7.60	15.97	6.72	807	14	3.772
39> Rosenhahnite - Ca3(Si3O8(OH)2)	+	29-378	4.8	18	-0.18		P-1 (2)	6.95	9.48	6.81	420	2	2.899
40> Hedenbergite - CaFeSi2O6	+	41-1372	4.8	10	0.12		C2/c (15)	9.86	9.05	5.26	227	4	3.629
41> Parwelite - (Mn,Mg,Ca)5SbAsSiO12	+	29-346	4.8	10	0.06		Aa (9)	10.05	19.42	9.73	945	8	4.620
42> Ferrosilite, magnesian - (Fe,Mg)	+	31-634	4.8	7	0.06		Pcab (61)	8.92	18.33	5.22	852	16	3.630
43> Liroconite - Cu2Al(As,P)O4(OH)4!	+	12-526	4.8	13	-0.12		I2/a (15)	12.66	7.57	9.90	475	4	2.960
44> Aristarainite - Na2MgB12O20!8H2O	+	26-1379	4.8	18	0.00		P21/a (14)	18.87	7.53	7.81	1100	2	2.006
45> Huemulite - Na4MgV10O28!24H2O	+	18-1225	4.8	17	-0.12		P-1 (2)	11.77	11.84	9.02	1040	1	2.404
46> Nordstrandite, syn - Al(OH)3	+	24-6	4.8	17	0.00		P1 (1)	5.08	5.13	4.98	106	2	2.441
47> Junoite - Pb3Cu2Bi8(S,Se)16	+	42-567	4.8	7	0.00		I2/m (12)	21.17	4.06	17.17	737	2	7.242
48> Scawtite - Ca7(Si6O18)(CO3)!2H2O	+	31-261	4.9	6	0.06		I2/m (12)	10.12	15.18	6.62	500	2	2.766
49> Ferrinatrite - Na3Fe(SO4)3!3H2O	+	41-609	4.9	23	0.00		P-3 (147)	15.55	15.55	8.66	1815	6	2.564
50> Sj\Plogrenite - Mg6Fe2CO3(OH)16!	+	24-1091	4.9	50	-0.06		P63/mmc (194)	3.11	3.11	15.61	131		2.097
51> Moissanite-15\ITR\RG, syn - SiC	+	39-1196	4.9	4	0.00		R3m (160)	3.07	3.07	37.70	103	15	3.239
52> R\Piomorite - Fe3(SO4)4!14H2O	+	34-144	5.0	16	0.00	1.1	P-1 (2)	6.46	15.31	6.34	614	1	2.174
53> Hydroxypophyllite - KCa4Si8O20(	+	30-920	5.0	38	0.00	0.8	P4/mnc (128)	8.98	8.98	15.83	1276	2	2.356
54> Joliotite - (UO2)CO3!2H2O	+	29-1378	5.1	9	0.06		P*** (47)	8.16	10.35	6.32	534	4	4.555
55> Grunantite - NaSi2O4(OH)!H2O	+	42-1331	5.1	17	0.06		F ()	16.00	18.24	7.18	524	16	2.259
56> Bartonite - K3Fe10S14	+	35-476	5.2	17	0.12		I4/mmm (139)	10.42	10.42	20.63	1121	4	3.333
57> Pyroxferroite - (Fe0.86Ca0.14)Si	+	20-1	5.3	8	0.06		P-1 (2)	7.54	15.81	6.62	782	14	3.857
58> Wollastonite-1\ITA\RG - CaSiO3	+	42-550	5.3	14	-0.06	0.9	P-1 (2)	7.31	7.91	7.06	396	6	2.925
59> Ferrihydrite, syn - Fe5O7(OH)!4H	+	29-712	5.4	5	0.06		P ()	5.08	5.08	9.40	210	1	3.796
60> Gypsum, syn - CaSO4!2H2O	+	33-311	5.5	14	-0.06	1.8	C2/c (15)	6.28	15.21	5.68	248	4	2.308
61> Yavapaiite, syn - KFe(SO4)2	+	29-1438	5.5	18	0.00	1.0	C2/m (12)	8.15	5.15	7.88	165	2	2.890
62> Uranophane-SGB - Ca(UO2)2(SiO3OH	+	8-301	5.5	18	0.18		P21/a (14)	14.01	15.55	6.64	1446	4	3.933
63> Paraspurrite - Ca5(SiO4)2CO3	+	29-307	5.5	17	-0.18		P21/c (14)	27.78	6.71	10.47	1950	8	3.028
64> Anhydrite, syn - CaSO4	+	37-1496	5.5	17	0.00		Bmmb (63)	6.99	7.00	6.24	153	4	2.959
65> Spurrite - Ca5(SiO4)2CO3	+	13-496	5.6	9	0.06		P21/c (14)	14.15	6.70	10.49	976	4	3.026
66> Rhodesite - (Ca,K,Na)8Si16O40!11	+	22-1253	5.6	10	0.00		P21/n (14)	9.62	23.96	9.51	2186	2	2.360

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

76 Hits Sorted on Figure-Of-Merit										QM*	PDF-#	FOM	I%	OFF	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
67>	Humboldtine, syn - C2FeO4!2H2O	+	23- 293	5.6	18	0.00	1.5	I2/a (15)	9.92	5.56	9.71	259	4	2.307								
68>	Urancalcarite - Ca(UO2)3CO3(OH)6	+	38- 350	5.7	19	0.12		Pbn* (62)	15.42	16.08	6.97	1728	4	4.098								
69>	Metacalcicuranite - CaU2O7!11H2O		26-1003	5.7	9	0.00								4.620								
	Unnamed mineral [NR] - UO3-H2O	?	15- 569	5.7	20	-0.06																
71>	Afwillite - Ca3(SiO3OH)2!2H2O	+	29- 330	5.7	6	0.06		Ia (9)	13.24	5.63	11.66	430	4	2.647								
72>	Wegscheiderite - Na2CO3!3NaHCO3	+	15- 653	5.7	6	0.06		P-1 (2)	10.04	15.56	3.47	509	2	2.336								
73>	Hydroxyapophyllite - KCa4Si8O20(	+	29- 994	5.9	26	0.12		P4/mnc (128)	8.98	8.98	15.83	1276	2	2.356								
74>	Akaganeite-ITM\RG, syn - FeO(OH		34-1266	5.9	25	0.06		I4/m (87)	10.53	10.53	3.03	168	8	3.510								
75>	Bilinite - FeFe2(SO4)4!22H2O		25-1153	5.9	8	0.12		P21/n (14)	21.05	24.33	6.21	3159	4	1.993								
76>	Tridymite-20\ITH\RG, syn - SiO2		14- 260	5.9	7	-0.06		P ()	9.92	9.92	81.50	6946	160	2.298								

* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.
 * vol - reduced-cell volume; dx - measured density if calculated is not available.

Current S/M parameters:

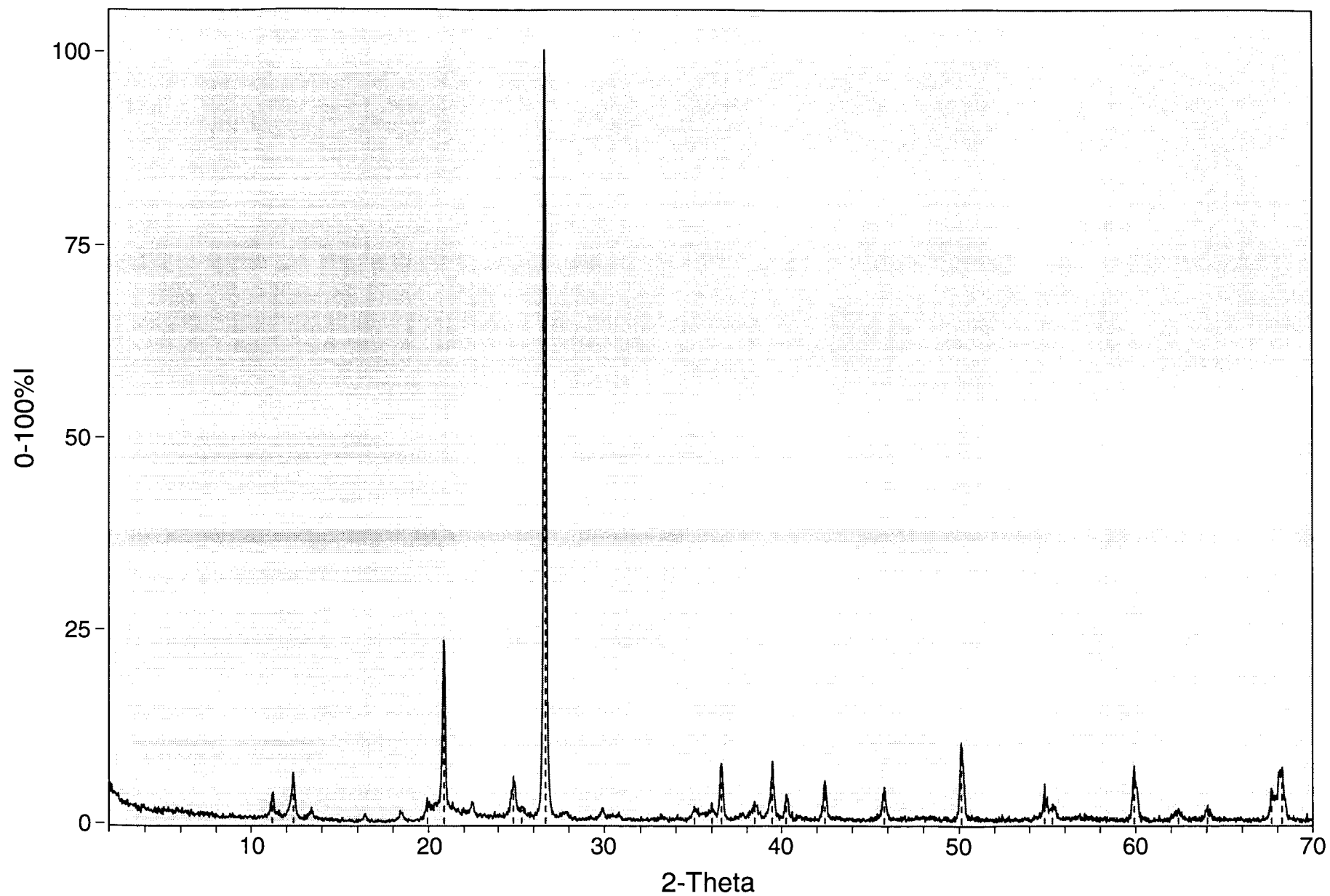
PDF Subfile to Search	MINERALS	2-Theta Error Window	.18
Chemistry Filter	NF,CHM (Yes)	Sensitivity to Matching Intensity	5
Search Focus on	Major Phase(s)	Sensitivity to Matching 2-Theta	5
Preferred Orientation in Sample	Yes	Maximum Number of Hits to Save	40
Search only High Quality Phases	No	Rubber-Ruler Search - %Elasticity	0
Exclude Questionable Phases	No	Required 100% Line in Srched Range ...	No

ID: 2/18/94 - NOPI-292-XRD1

File: NOPI2921.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

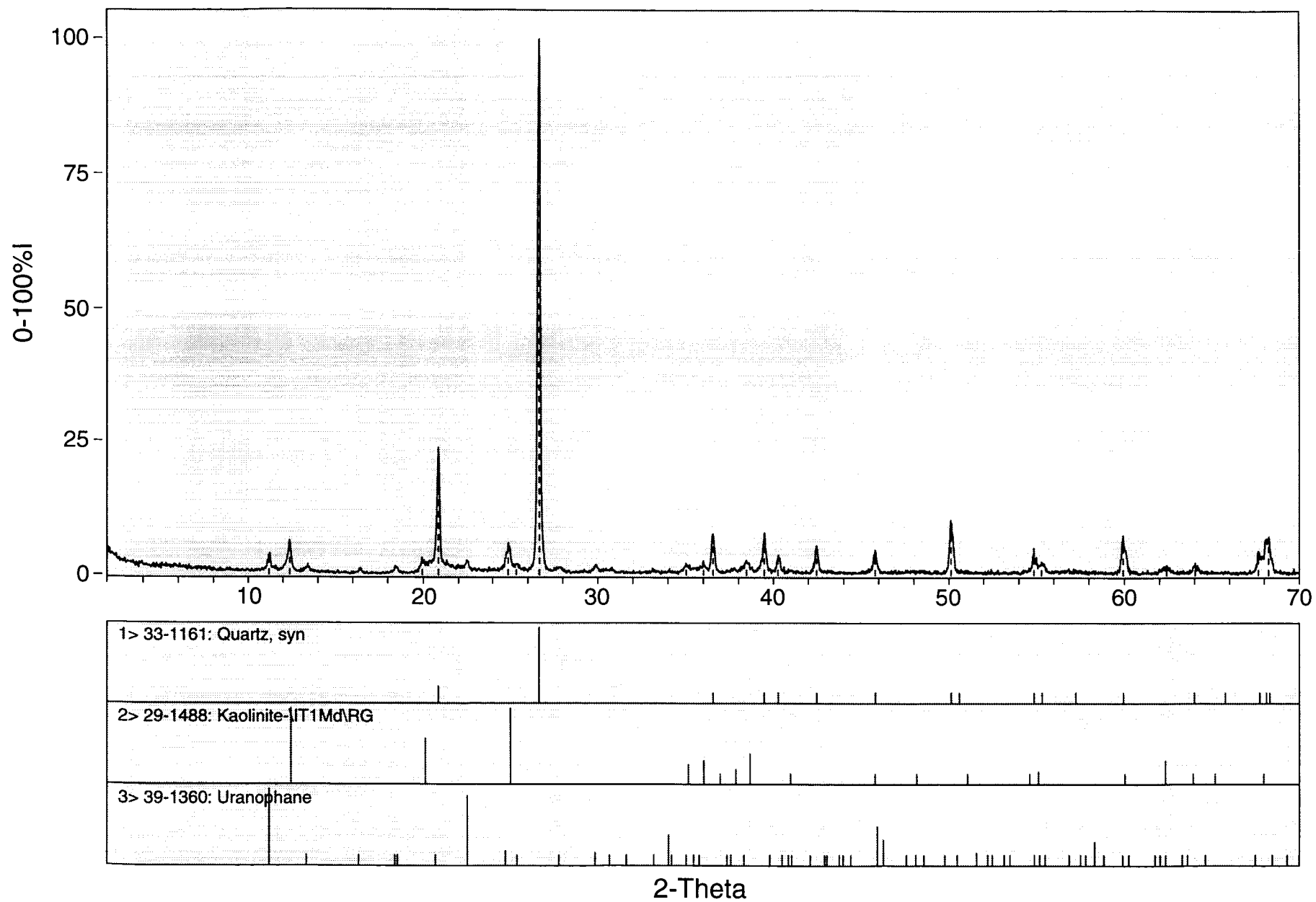


ID: 2/18/94 - NOPI-292-XRD1

File: NOPI2921.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Tue Feb 22 1994 @10:09am

File: NOPI2921.MDI> 2/18/94 - NOPI-292-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           || Filter length(pts) = 25
Scan Range  = 2 - 70                || Noise level(sigmas) = 3.0
Step Size   = .02                   || Intensity cutoff(%) = 2.0-100
Count Time  = 1 sec.                || 2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.190	7.9008	11.196	7.8969	11	60	3.5	640	3.6	0.192
2:	12.389	7.1390	12.369	7.1503	10	104	6.0	1250	7.1	0.216
3:	19.929	4.4516	19.962	4.4444	10	51	3.0	627	3.6	0.221
4:	20.867	4.2536	20.857	4.2556	11	415	24.1	5656	32.2	0.245
5:	24.867	3.5777	24.875	3.5765	14	93	5.4	1352	7.7	0.262
6:	25.327	3.5137	25.319	3.5149	13	26	1.5	412	2.3	0.285
7:	26.665	3.3404	26.650	3.3422	13	1720	100.0	17561	100.0	0.184
8:	35.025	2.5599	35.045	2.5585	8	32	1.9	438	2.5	0.246
9:	36.004	2.4925	35.996	2.4930	8	40	2.3	1219	6.9	0.549
10:	36.544	2.4568	36.547	2.4567	9	125	7.3	1454	8.3	0.209
11:	38.444	2.3397	38.451	2.3393	11	41	2.4	641	3.7	0.281
12:	39.464	2.2816	39.461	2.2817	12	126	7.3	1447	8.2	0.207
13:	40.265	2.2380	40.279	2.2372	12	55	3.2	505	2.9	0.165
14:	42.463	2.1271	42.457	2.1274	7	89	5.2	1036	5.9	0.210
15:	45.801	1.9795	45.793	1.9798	8	75	4.4	875	5.0	0.210
16:	50.122	1.8185	50.147	1.8177	7	174	10.1	2135	12.2	0.221
17:	54.861	1.6721	54.887	1.6714	8	80	4.7	948	5.4	0.213
18:	55.301	1.6599	55.279	1.6605	9	35	2.0	682	3.9	0.351
19:	59.920	1.5425	59.950	1.5418	6	124	7.2	1656	9.4	0.240
20:	62.417	1.4866	62.399	1.4870	6	29	1.7	487	2.8	0.302
21:	64.037	1.4529	64.044	1.4527	7	36	2.1	394	2.2	0.197
22:	67.659	1.3836	67.723	1.3825	6	73	4.2	1136	6.5	0.280
23:	68.255	1.3730	68.214	1.3737	6	119	6.9	2581	14.7	0.390

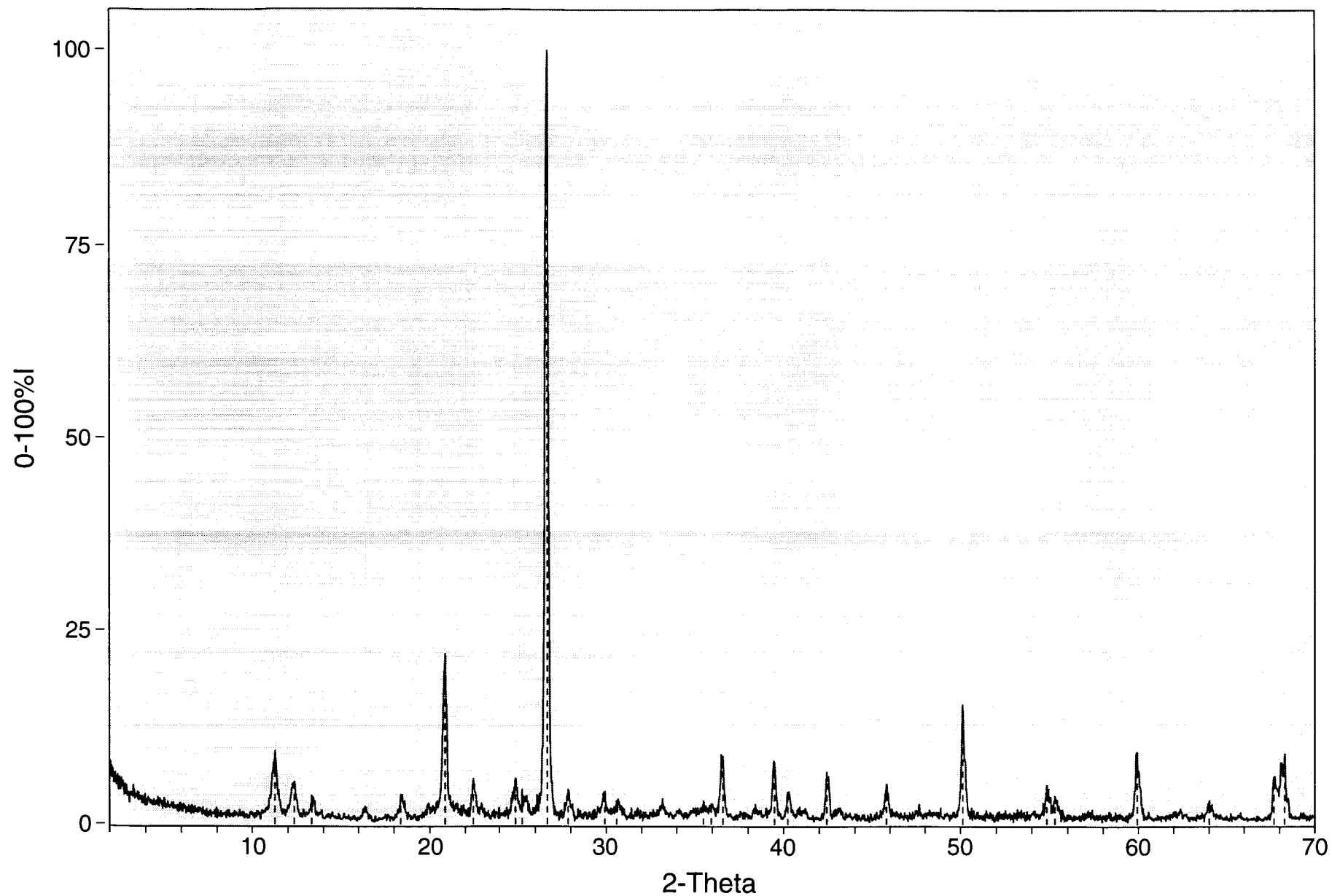
* Intensity values are based on counts per second.

ID: 2/18/94 - NOPI-293-XRD1

File: NOPI2931.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

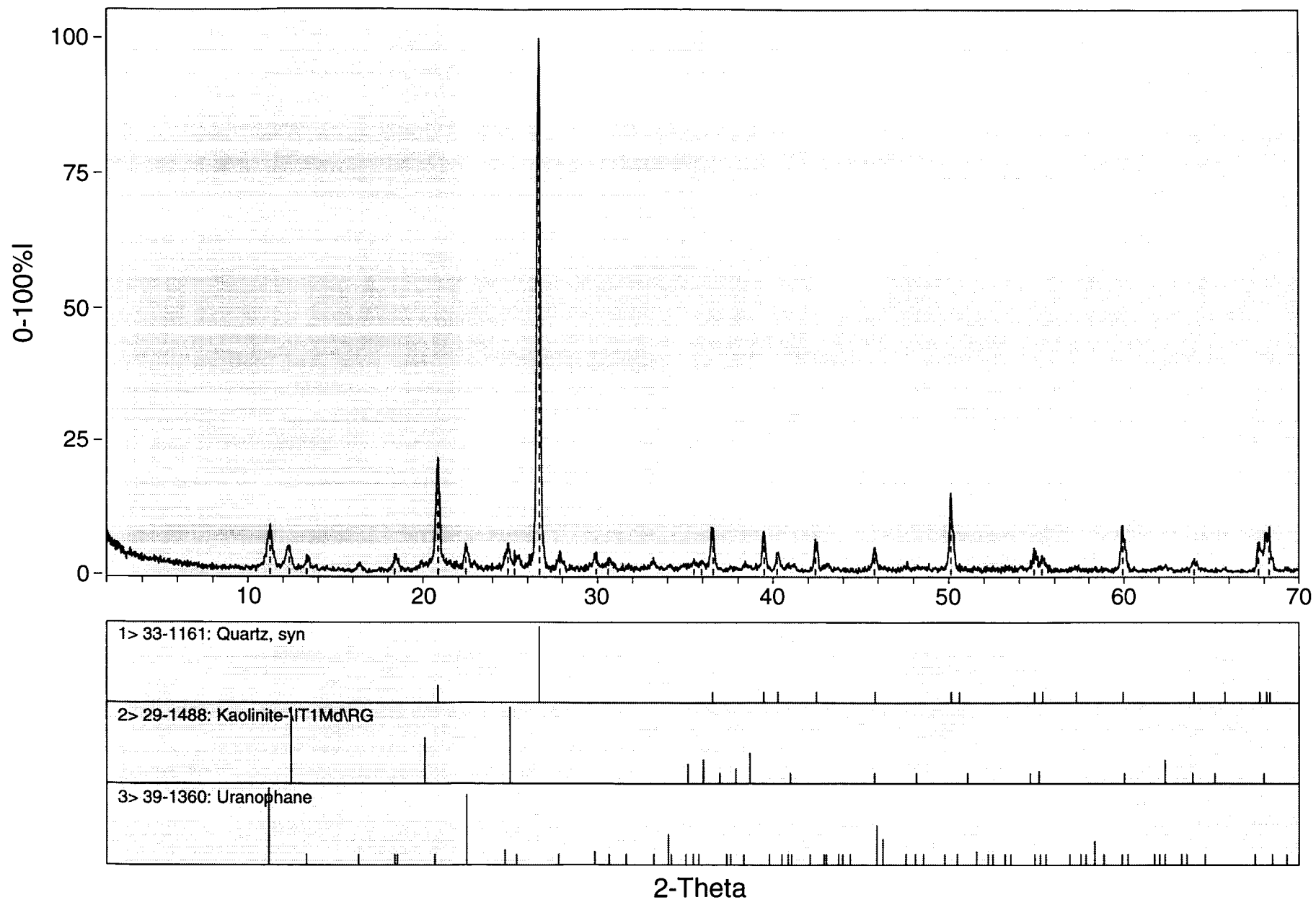


ID: 2/18/94 - NOPI-293-XRD1

File: NOPI2931.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



Jade: Peak Listing

Tue Feb 22 1994 @10:11am

File: NOPI2931.MDI> 2/18/94 - NOPI-293-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	11.270	7.8451	11.256	7.8547	10	86	8.6	1482	11.9	0.310
2:	12.349	7.1619	12.321	7.1778	9	50	5.0	768	6.2	0.276
3:	13.352	6.6260	13.368	6.6179	9	30	3.0	264	2.1	0.158
4:	18.368	4.8262	18.407	4.8161	6	34	3.4	462	3.7	0.245
5:	20.863	4.2543	20.849	4.2571	11	211	21.1	2875	23.0	0.245
6:	22.463	3.9549	22.473	3.9530	12	48	4.8	552	4.4	0.207
7:	24.882	3.5756	24.879	3.5760	11	49	4.9	693	5.6	0.255
8:	25.263	3.5225	25.263	3.5225	9	37	3.7	984	7.9	0.479
9:	26.677	3.3389	26.642	3.3433	11	999	100.0	12483	100.0	0.225
10:	27.839	3.2021	27.850	3.2009	8	37	3.7	448	3.6	0.218
11:	29.915	2.9845	29.892	2.9867	8	35	3.5	635	5.1	0.327
12:	30.599	2.9193	30.619	2.9174	8	26	2.6	288	2.3	0.199
13:	35.494	2.5271	35.504	2.5264	7	25	2.5	388	3.1	0.279
14:	35.934	2.4972	35.931	2.4973	8	22	2.2	305	2.4	0.250
15:	36.590	2.4539	36.560	2.4558	7	86	8.6	1009	8.1	0.211
16:	39.489	2.2801	39.477	2.2808	8	76	7.6	874	7.0	0.207
17:	40.232	2.2397	40.255	2.2385	7	38	3.8	392	3.1	0.186
18:	42.431	2.1286	42.449	2.1278	7	62	6.2	676	5.4	0.196
19:	45.787	1.9801	45.797	1.9797	5	50	5.0	676	5.4	0.243
20:	50.124	1.8185	50.147	1.8177	7	149	14.9	1769	14.2	0.214
21:	54.841	1.6727	54.872	1.6718	6	45	4.5	650	5.2	0.260
22:	55.281	1.6604	55.265	1.6608	6	31	3.1	805	6.4	0.467
23:	59.936	1.5421	59.949	1.5418	6	92	9.2	1263	10.1	0.247
24:	64.013	1.4534	64.018	1.4532	6	27	2.7	327	2.6	0.218
25:	67.672	1.3834	67.708	1.3827	5	57	5.7	759	6.1	0.240
26:	68.288	1.3724	68.230	1.3734	6	88	8.8	1534	12.3	0.314

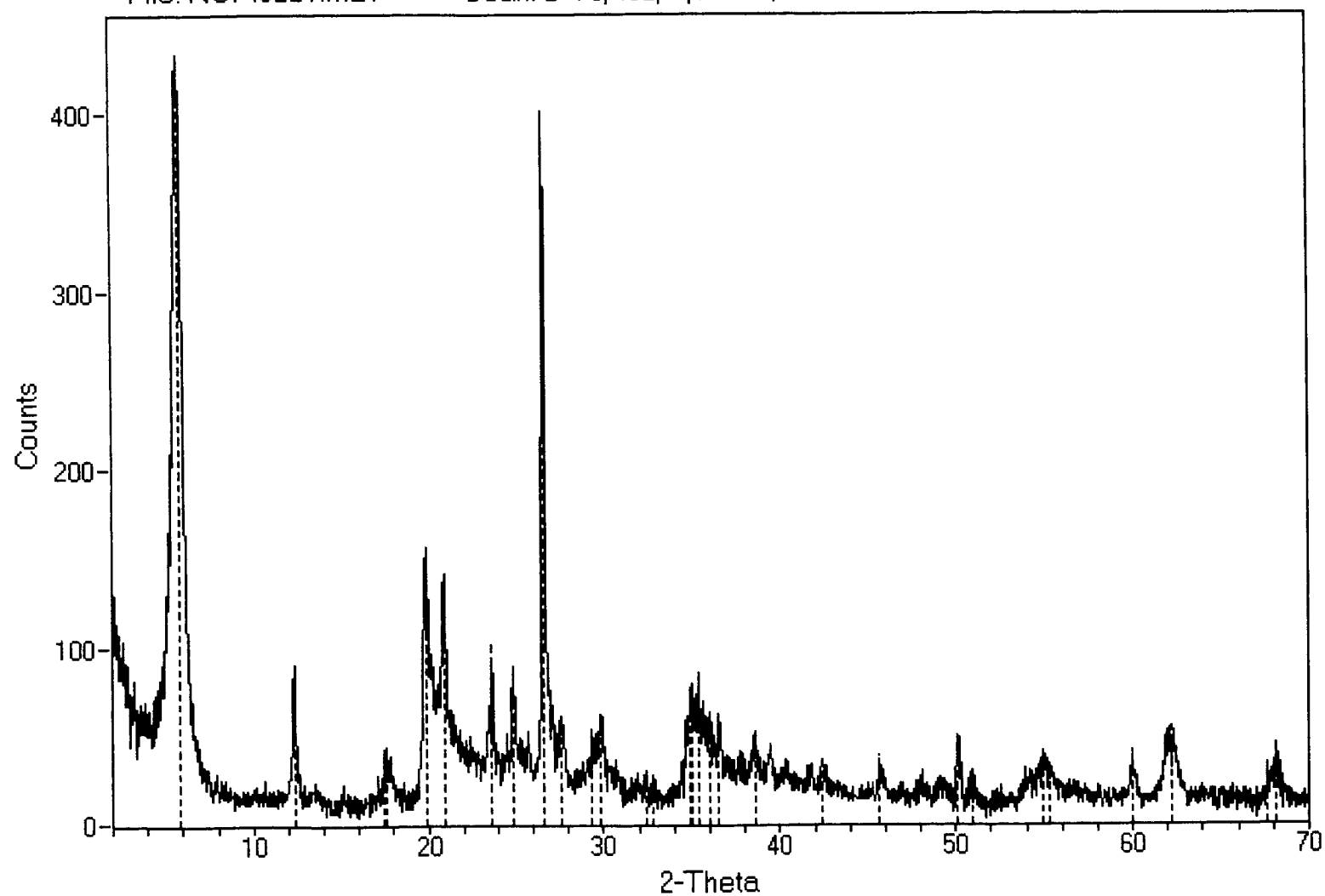
* Intensity values are based on counts per second.

N/S Traversé

ID: 4/12/94 - NOPI-322-XRD1

File: NOPI3221.MDI

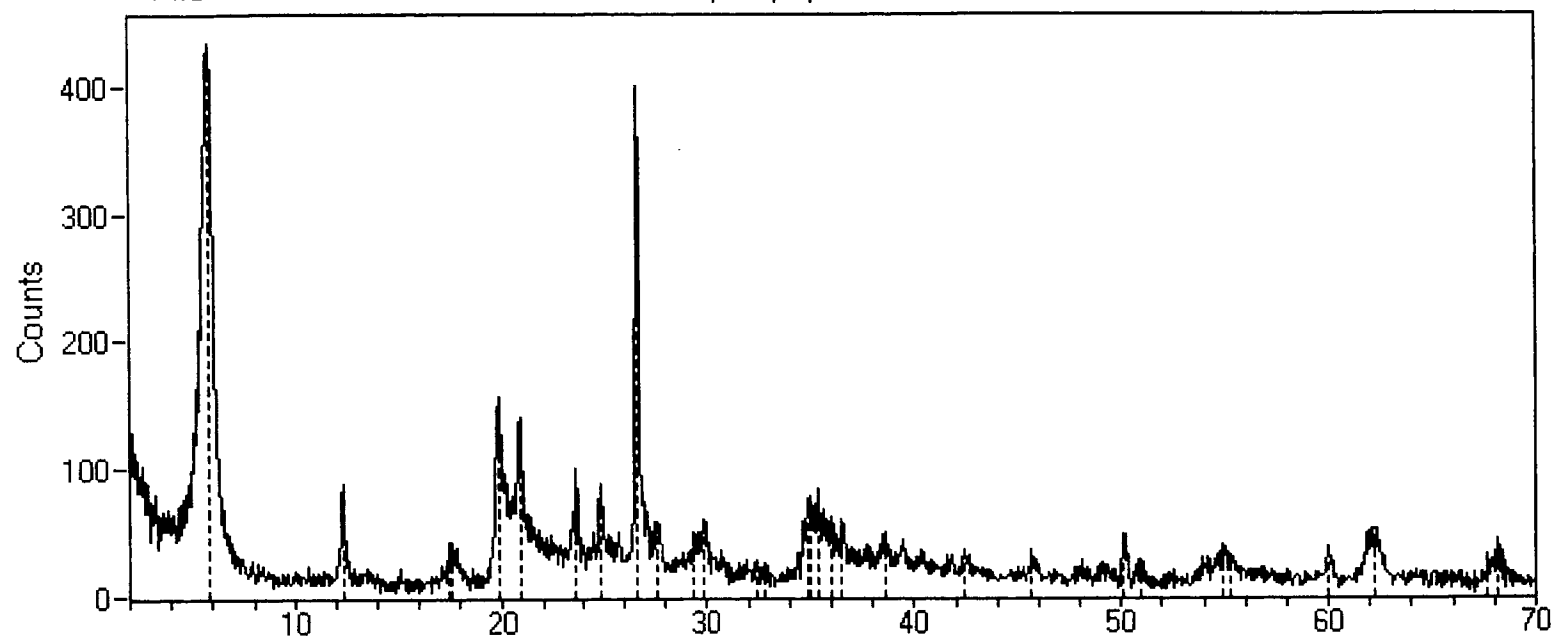
Scan: 2- 70/ .02/ 1/ #3401, Anode: CU



ID: 4/12/94 - NOPI-322-XRD1

File: NOPI3221.MDI

Scan: 2- 70/ .02/ 1/#3401, Anode: CU



5> 33-1161: Quartz, syn - SiO₂

6> 13-0135: Montmorillonite-15A - Ca_{0.2}(Al, Mg)₂Si₄O₁₀(OH)₂·4H₂O

7> 19-1227: Sanidine - (K, Na)(Si₃Al)O₈

8> 29-1488: Kaolinite-1\TMd\RG - Al₂Si₂O₅(OH)₄

2-Theta

Jade: Peak Listing

Tue Apr 19 1994 @10:37am

File: NOPI3221.MDI> 4/12/94 - NOPI-322-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           Filter length(pts) = 25
Scan Range  = 2- 70                 Noise level(sigmas) = 5.0
Step Size   = .02                    Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                 2-Theta Zero (deg) = 0
-----

```

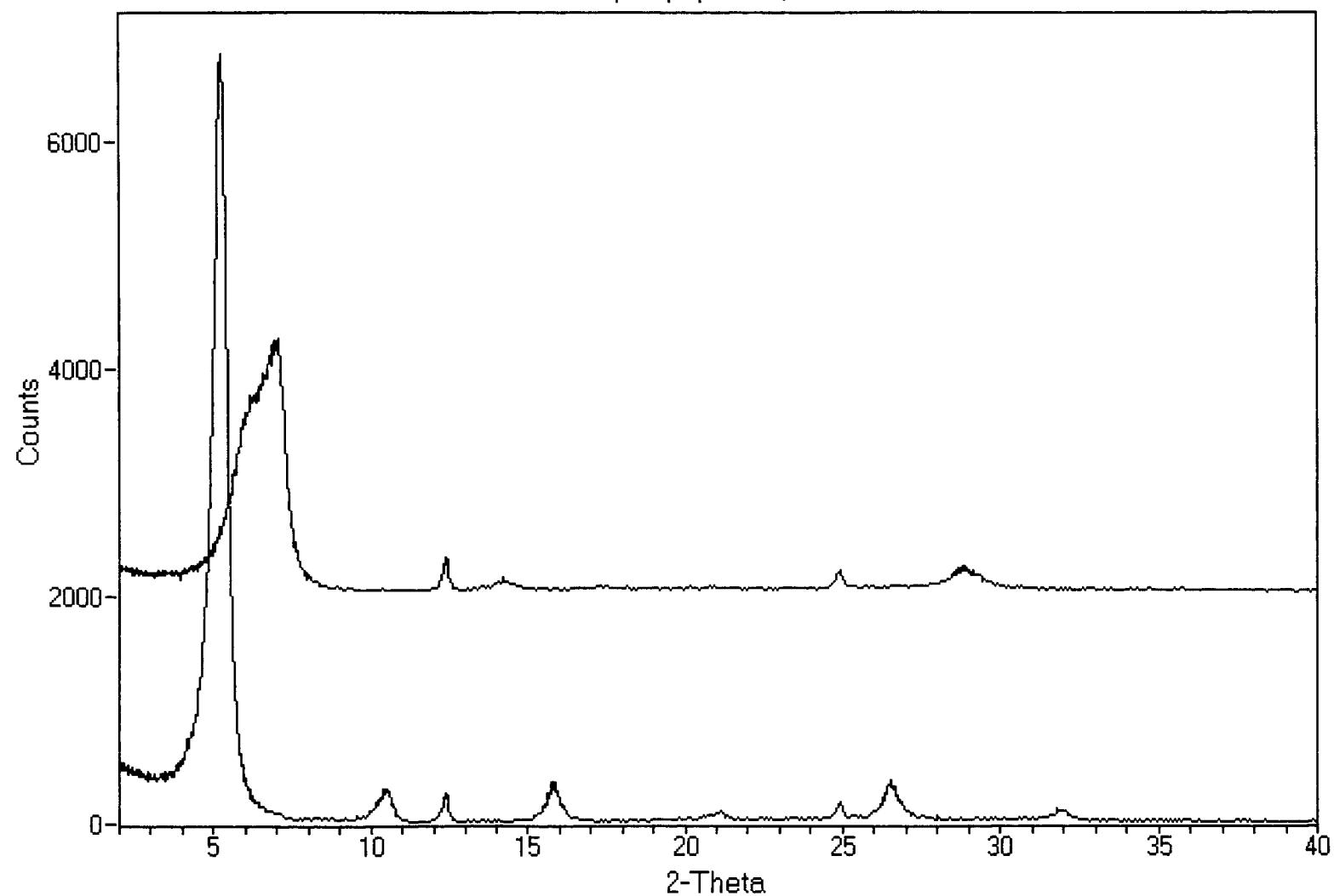
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.846	15.1069	5.844	15.1113	33	400	100.0	214	100.0	0.481
2:	12.353	7.1597	12.341	7.1663	11	80	20.0	15	7.0	0.169
3:	17.437	5.0819	17.437	5.0819	10	32	8.0	2	0.9	0.056
4:	17.598	5.0356	17.597	5.0358	10	33	8.3	3	1.4	0.082
5:	19.883	4.4618	19.883	4.4618	23	134	33.5	28	13.1	0.188
6:	20.881	4.2507	20.877	4.2515	22	120	30.0	41	19.2	0.308
7:	23.667	3.7562	23.667	3.7562	27	79	19.8	6	2.8	0.068
8:	24.831	3.5828	24.844	3.5809	27	63	15.8	11	5.1	0.157
9:	26.615	3.3466	26.628	3.3449	25	380	95.0	77	36.0	0.182
10:	27.633	3.2255	27.633	3.2255	21	41	10.3	2	0.9	0.044
11:	29.355	3.0401	29.355	3.0401	24	31	7.8	1	0.5	0.029
12:	29.776	2.9981	29.776	2.9981	22	41	10.3	3	1.4	0.066
13:	32.360	2.7643	32.360	2.7643	11	18	4.5	1	0.5	0.050
14:	32.840	2.7250	32.840	2.7250	10	18	4.5	1	0.5	0.050
15:	34.846	2.5726	34.854	2.5720	22	55	13.8	8	3.7	0.131
16:	35.019	2.5603	35.020	2.5602	23	57	14.3	6	2.8	0.095
17:	35.420	2.5322	35.419	2.5323	20	66	16.5	8	3.7	0.109
18:	36.004	2.4925	36.002	2.4926	21	41	10.3	9	4.2	0.198
19:	36.523	2.4582	36.520	2.4584	25	37	9.3	4	1.9	0.097
20:	38.541	2.3340	38.541	2.3340	27	26	6.5	1	0.5	0.035
21:	42.487	2.1259	42.487	2.1259	18	21	5.3	1	0.5	0.043
22:	45.698	1.9837	45.698	1.9837	15	25	6.3	1	0.5	0.036
23:	50.139	1.8180	50.141	1.8179	10	40	10.0	7	3.3	0.157
24:	50.942	1.7912	50.942	1.7912	8	21	5.3	1	0.5	0.043
25:	54.862	1.6721	54.862	1.6721	12	30	7.5	2	0.9	0.060
26:	55.342	1.6587	55.342	1.6587	11	23	5.8	1	0.5	0.039
27:	59.950	1.5418	59.950	1.5418	11	32	8.0	2	0.9	0.056
28:	62.191	1.4915	62.191	1.4915	13	43	10.8	2	0.9	0.042
29:	67.663	1.3836	67.663	1.3836	9	24	6.0	1	0.5	0.037
30:	68.125	1.3753	68.125	1.3753	10	34	8.5	2	0.9	0.053

* Intensity values are based on total raw counts.

ID: 4/6/94 - NOPI-322-GLY

File: NOPI322B.MDI

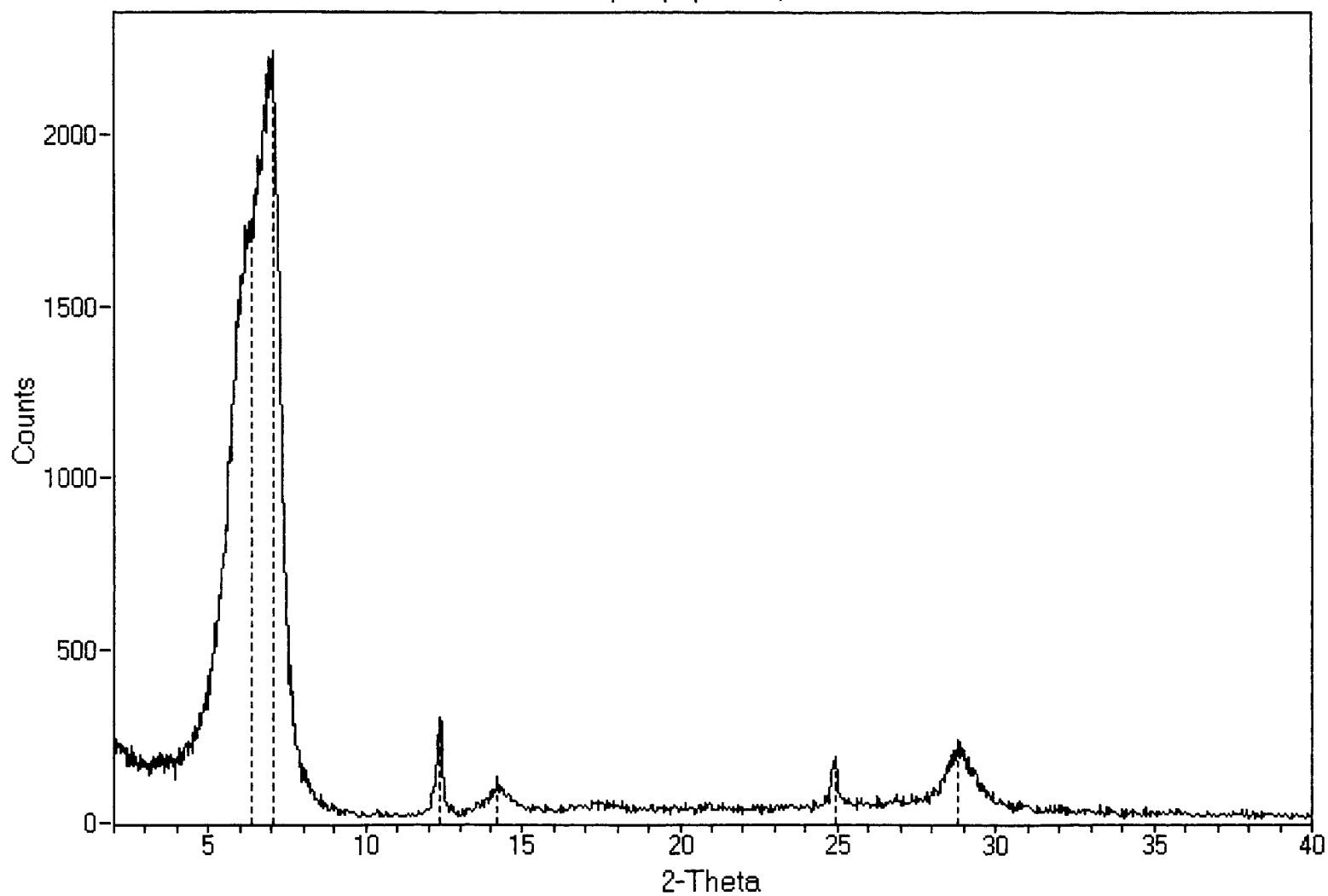
Scan: 2- 40/.02/ 1/#1901, Anode: CU



ID: 4/1/94 - NOPI-322-AD

File: NOPI322A.MDI

Scan: 2- 40/.02/1/#1901, Anode: CU



File: NOPI322A.MDI> 4/1/94 - NOPI-322-AD

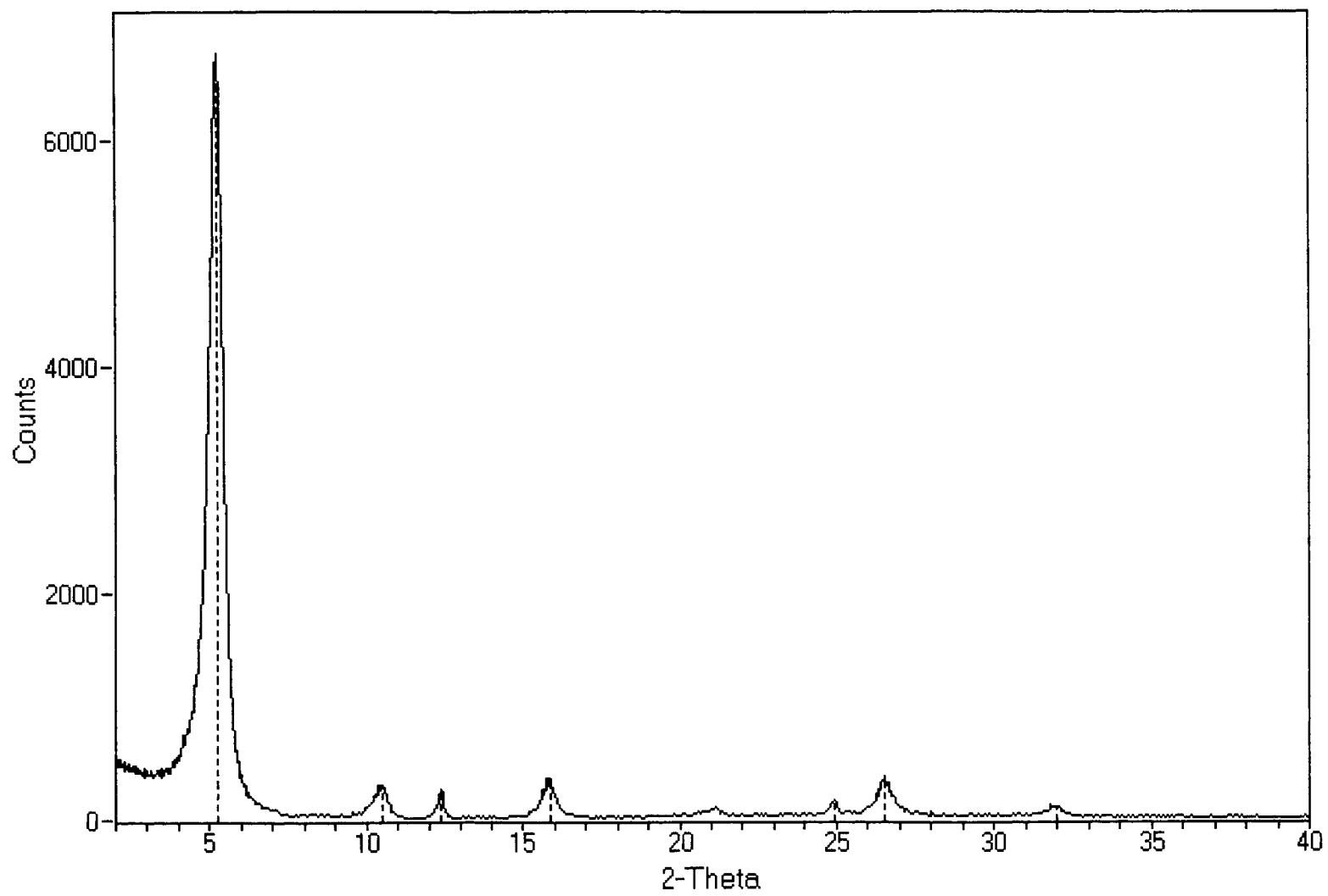
```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           Filter length(pts) = 25
Scan Range  = 2- 40                 Noise level(sigmas) = 5.0
Step Size   = .02                   Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                2-Theta Zero (deg) = 0
-----
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.320	13.9738	6.320	13.9733	154	1598	78.8	2289	100.0	1.289
2:	7.020	12.5825	7.019	12.5829	208	2029	100.0	1172	51.2	0.520
3:	12.379	7.1442	12.378	7.1449	22	283	13.9	49	2.1	0.156
4:	14.242	6.2140	14.244	6.2129	27	104	5.1	43	1.9	0.372
5:	24.918	3.5704	24.906	3.5722	45	146	7.2	28	1.2	0.173
6:	28.841	3.0931	28.840	3.0932	54	186	9.2	119	5.2	0.576

* Intensity values are based on total raw counts.

NOPI 322B



File: NOPI322B.MDI> 4/6/94 - NOPI-322-GLY

----- Scan Parameters: ----- Search Parameters: -----
Radiation = CU_1.540598 || Filter length(pts) = 25
Scan Range = 2- 40 || Noise level(sigmas) = 5.0
Step Size = .02 || Intensity cutoff(%) = .5-100
Count Time = 1 sec. || 2-Theta Zero (deg) = 0

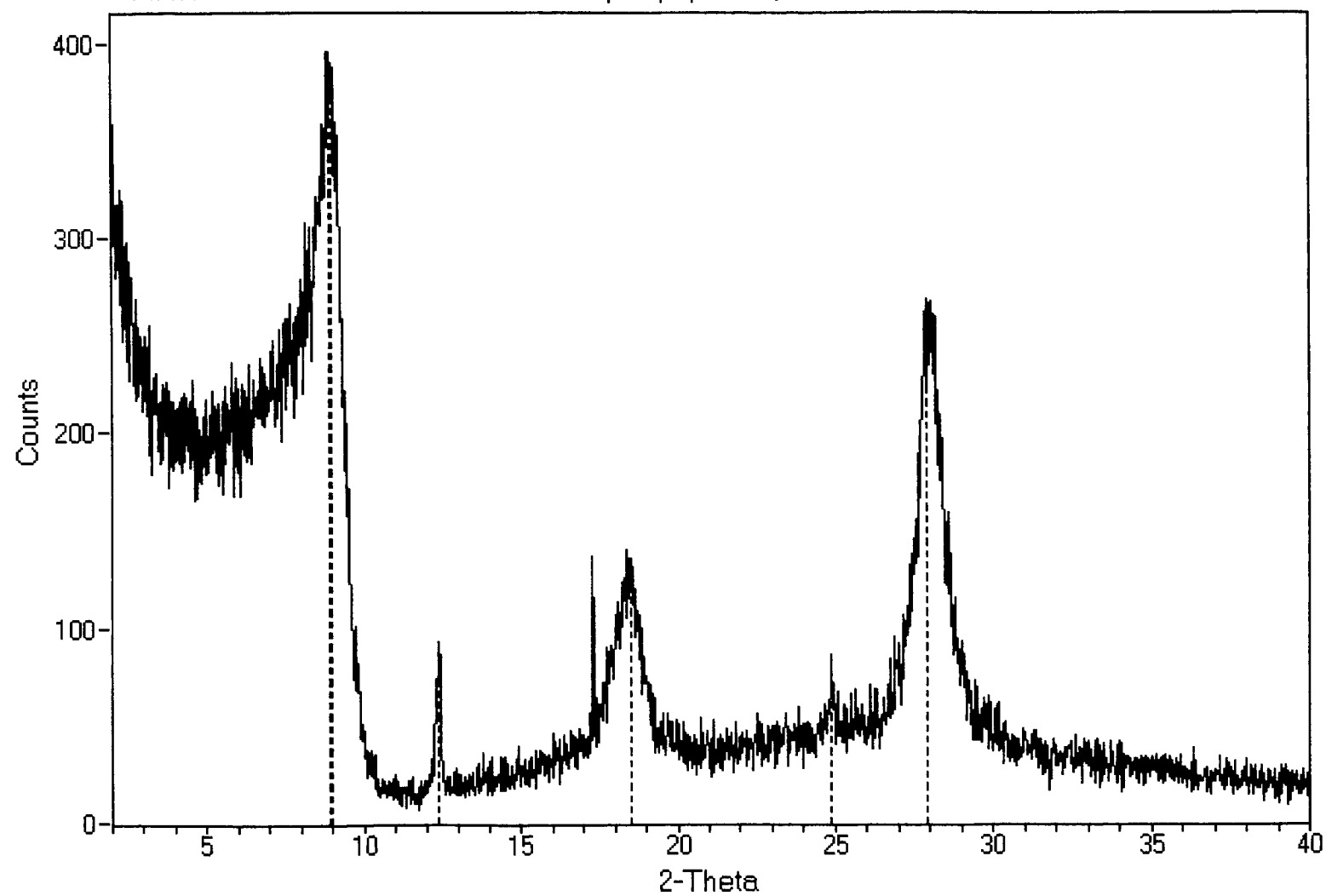
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.240	16.8516	5.226	16.8977	257	6523	100.0	4122	100.0	0.569
2:	10.500	8.4183	10.481	8.4338	29	279	4.3	145	3.5	0.468
3:	12.360	7.1555	12.344	7.1644	20	244	3.7	56	1.4	0.207
4:	15.879	5.5766	15.880	5.5764	21	343	5.3	141	3.4	0.370
5:	24.921	3.5701	24.915	3.5709	57	131	2.0	21	0.5	0.144
6:	26.520	3.3583	26.520	3.3584	56	321	4.9	173	4.2	0.485
7:	31.960	2.7980	31.946	2.7992	34	102	1.6	43	1.0	0.379

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-322-375C

File: NOPI322C.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI322C.MDI> 4/12/94 - NOPI-322-375C

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           || Filter length(pts)   = 25
Scan Range  = 2- 40                 || Noise level(sigmas)  = 5.0
Step Size   = .02                   || Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                || 2-Theta Zero (deg)  = 0
-----

```

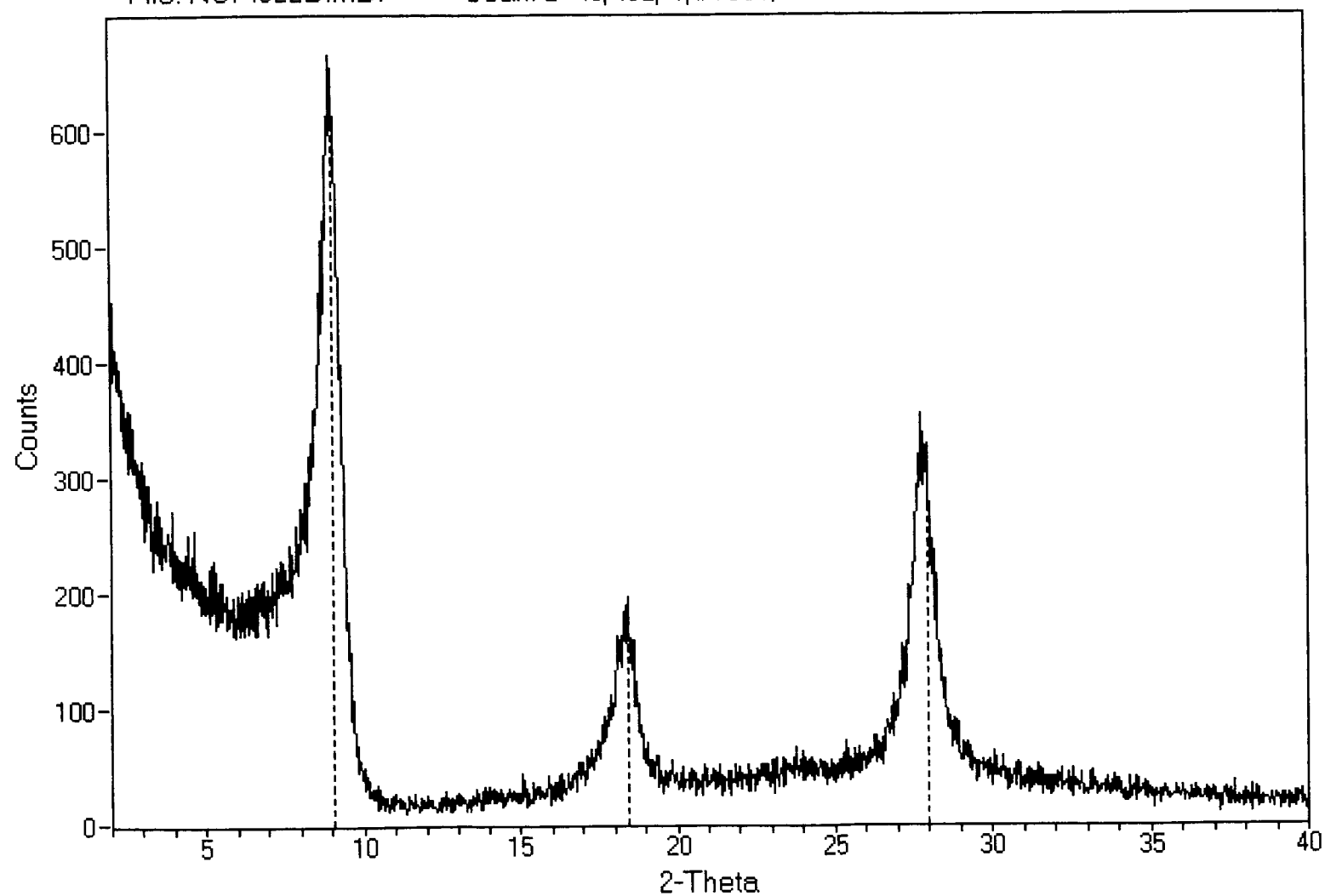
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	8.940	9.8836	8.946	9.8766	126	269	100.0	185	100.0	0.619
2:	8.980	9.8396	8.981	9.8380	123	266	98.9	168	90.8	0.568
3:	12.360	7.1557	12.356	7.1580	14	79	29.4	11	5.9	0.125
4:	18.539	4.7823	18.535	4.7833	36	99	36.8	48	25.9	0.436
5:	24.881	3.5757	24.881	3.5757	43	43	16.0	2	1.1	0.042
6:	27.898	3.1955	27.908	3.1943	44	225	83.6	119	64.3	0.476

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-322-550C

File: NOPI322D.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI322D.MDI> 4/12/94 - NOPI-322-550C

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           || Filter length(pts)   = 25
Scan Range  = 2- 40                 || Noise level(sigmas)  = 5.0
Step Size   = .02                   || Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                || 2-Theta Zero (degs) = 0
-----
  
```

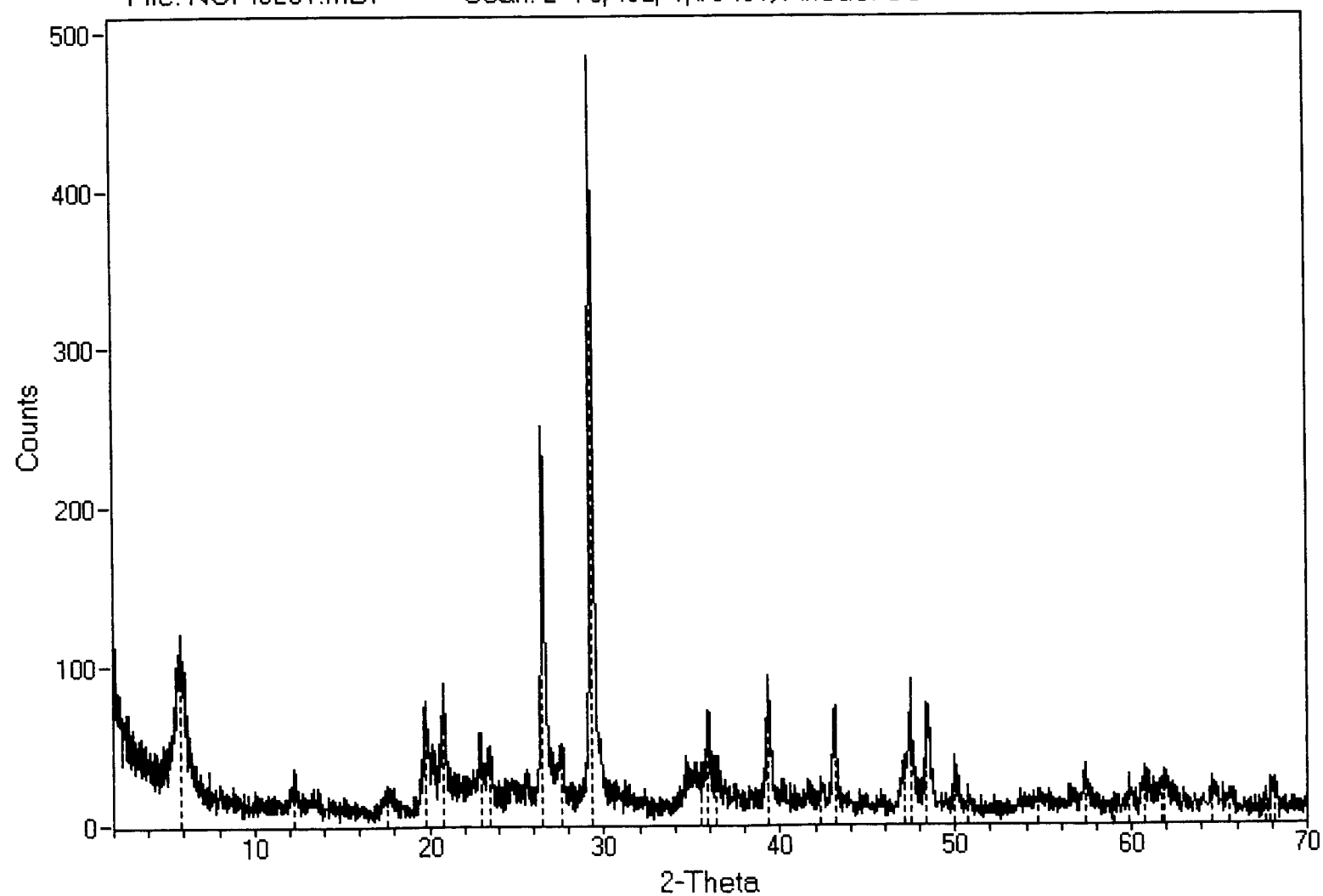
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	9.020	9.7957	9.029	9.7866	109	545	100.0	116	86.6	0.192
2:	18.440	4.8077	18.440	4.8076	32	165	30.3	28	20.9	0.153
3:	27.958	3.1887	27.960	3.1886	47	281	51.6	134	100.0	0.429

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-328-XRD1

File: NOPI3281.MDI

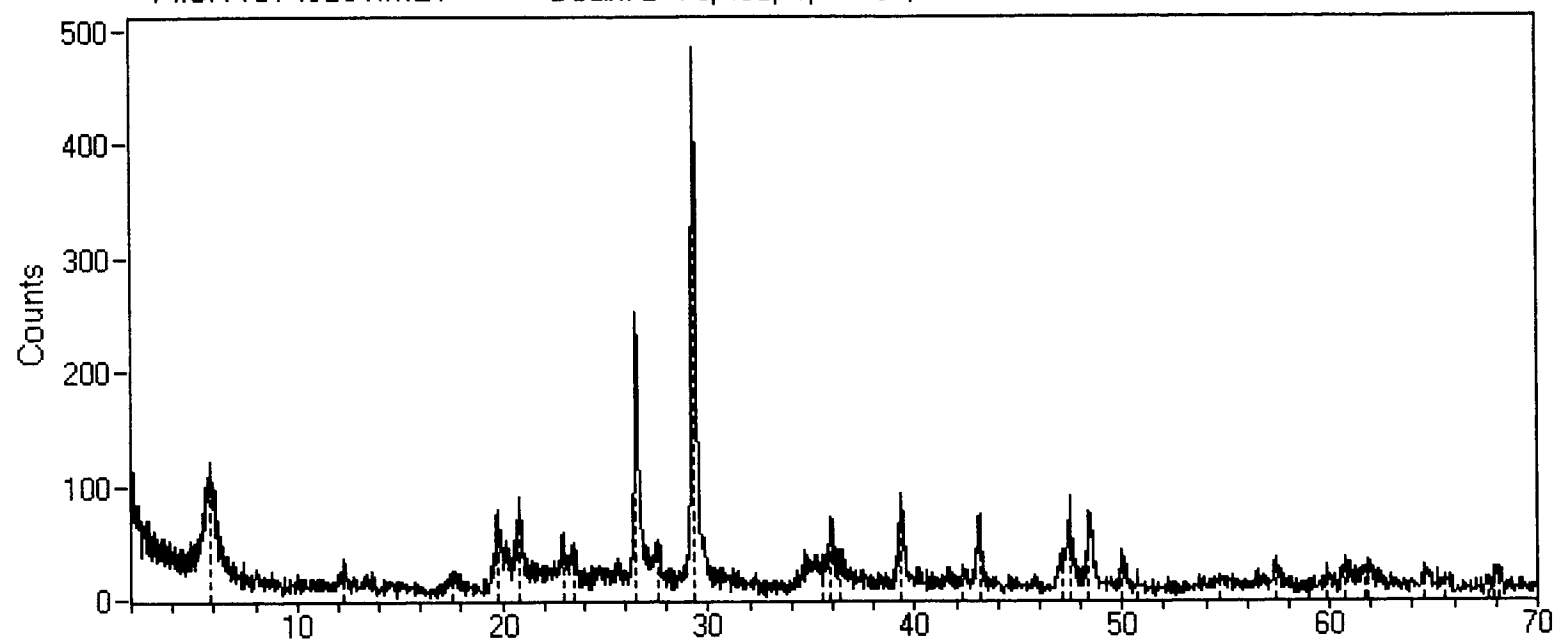
Scan: 2- 70/ .02/ 1/#3401, Anode: CU



ID: 4/12/94 - NOPI-328-XRD1

File: NOPI3281.MDI

Scan: 2- 70/ .02/ 1/#3401, Anode: CU



1> 13-0135: Montmorillonite-15A - $\text{Ca}_{0.2}(\text{Al}, \text{Mg})_2\text{Si}_4\text{O}_{10}(\text{OH})_2 \cdot 4\text{H}_2\text{O}$

2> 33-1161: Quartz, syn - SiO_2

3> 05-0586: Calcite, syn - CaCO_3

4> 29-1488: Kaolinite-1 (TMd)RG - $\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$

2-Theta

Jade: Peak Listing

Tue Apr 19 1994 @12:09pm

File: NOPI3281.MDI> 4/12/94 - NOPI-328-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
 Scan Range = 2- 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
 Noise level(sigmas) = 5.0
 Intensity cutoff(%) = .5-100
 2-Theta Zero (degs) = 0

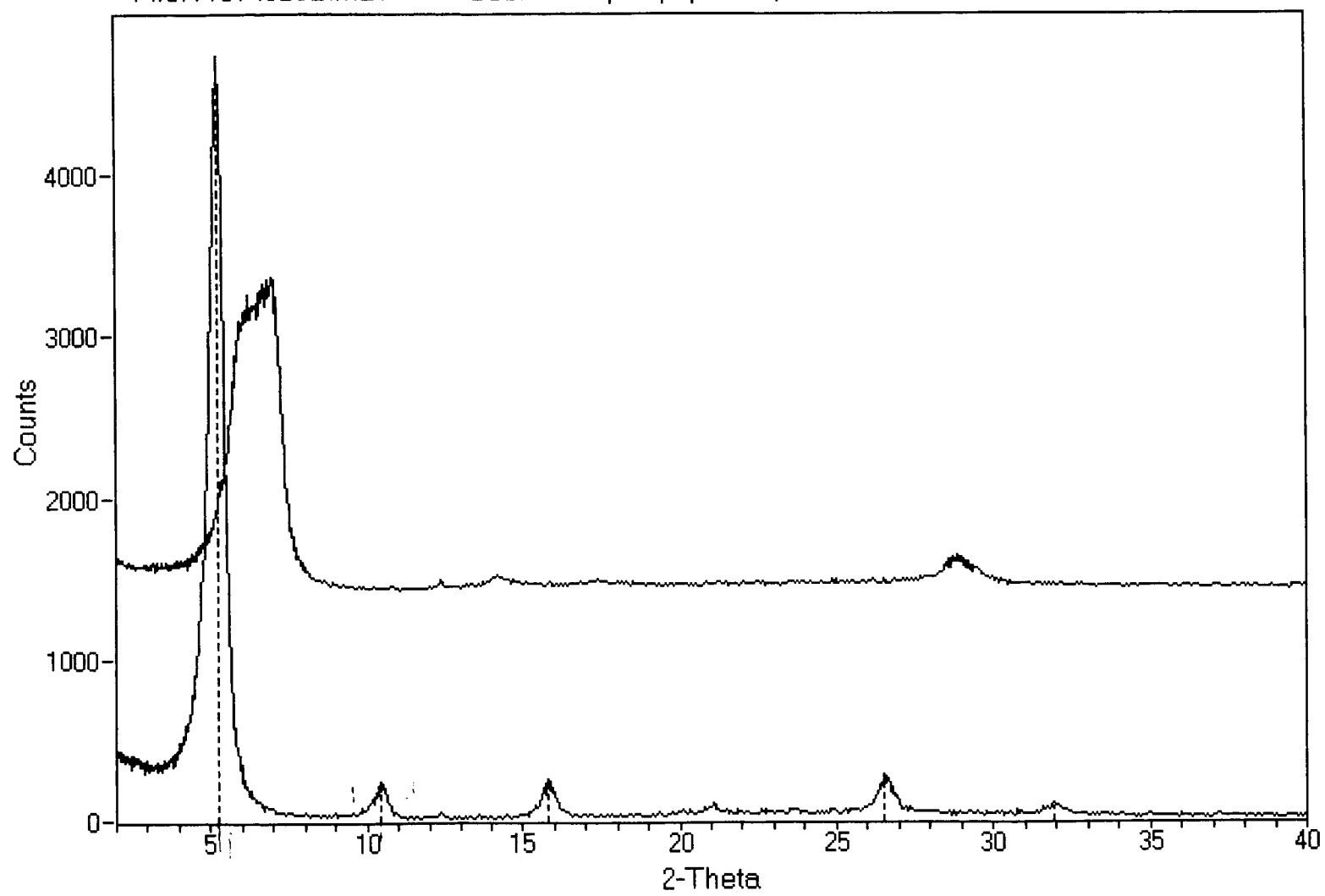
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.858	15.0755	5.851	15.0941	27	94	20.0	33	28.0	0.316
2:	12.283	7.2000	12.283	7.2000	10	26	5.5	1	0.8	0.035
3:	17.619	5.0298	17.619	5.0298	9	16	3.4	1	0.8	0.056
4:	19.799	4.4806	19.797	4.4809	13	65	13.8	7	5.9	0.097
5:	20.820	4.2630	20.812	4.2648	17	72	15.3	15	12.7	0.188
6:	22.962	3.8700	22.959	3.8705	17	41	8.7	6	5.1	0.132
7:	23.462	3.7887	23.462	3.7887	16	34	7.2	2	1.7	0.053
8:	26.521	3.3582	26.538	3.3561	16	235	50.0	54	45.8	0.207
9:	27.640	3.2247	27.640	3.2247	15	36	7.7	3	2.5	0.075
10:	29.340	3.0416	29.342	3.0414	14	470	100.0	118	100.0	0.226
11:	35.481	2.5280	35.481	2.5280	12	27	5.7	1	0.8	0.033
12:	35.880	2.5008	35.881	2.5007	12	60	12.8	11	9.3	0.165
13:	36.421	2.4649	36.421	2.4649	13	29	6.2	1	0.8	0.031
14:	39.363	2.2872	39.358	2.2875	11	82	17.4	19	16.1	0.209
15:	42.301	2.1349	42.301	2.1349	10	19	4.0	1	0.8	0.047
16:	43.118	2.0963	43.110	2.0966	9	65	13.8	14	11.9	0.194
17:	47.162	1.9255	47.161	1.9256	8	35	7.4	12	10.2	0.309
18:	47.482	1.9133	47.463	1.9140	9	81	17.2	21	17.8	0.233
19:	48.422	1.8783	48.421	1.8784	9	67	14.3	11	9.3	0.148
20:	49.984	1.8232	49.984	1.8232	9	33	7.0	1	0.8	0.027
21:	50.739	1.7979	50.739	1.7979	9	15	3.2	1	0.8	0.060
22:	54.721	1.6761	54.721	1.6761	7	14	3.0	1	0.8	0.064
23:	57.417	1.6036	57.412	1.6037	7	30	6.4	4	3.4	0.120
24:	58.999	1.5643	58.999	1.5643	5	13	2.8	1	0.8	0.069
25:	59.884	1.5433	59.884	1.5433	8	22	4.7	1	0.8	0.041
26:	60.781	1.5227	60.781	1.5227	9	27	5.7	1	0.8	0.033
27:	61.721	1.5017	61.721	1.5017	8	19	4.0	1	0.8	0.047
28:	61.822	1.4995	61.822	1.4995	9	24	5.1	1	0.8	0.037
29:	64.607	1.4414	64.607	1.4414	9	20	4.3	1	0.8	0.045
30:	65.561	1.4227	65.561	1.4227	7	14	3.0	1	0.8	0.064
31:	67.598	1.3847	67.598	1.3847	4	16	3.4	1	0.8	0.056
32:	67.944	1.3785	67.944	1.3785	5	23	4.9	1	0.8	0.039
33:	68.160	1.3747	68.162	1.3746	5	22	4.7	2	1.7	0.082

* Intensity values are based on total raw counts.

ID: 4/6/94 - NOPI-328-GLY

File: NOPI328B.MDI

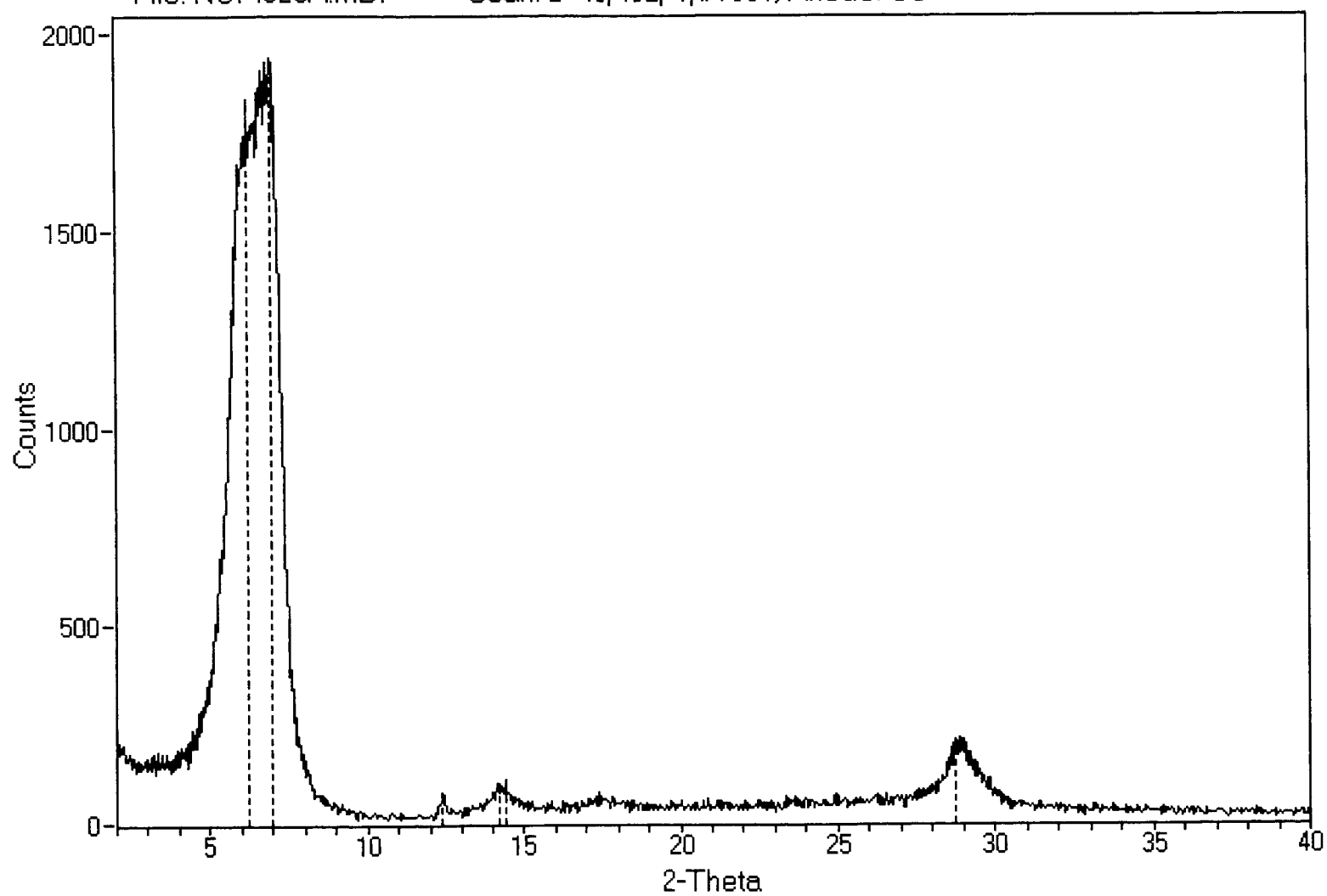
Scan: 2- 40/.02/1/#1901, Anode: CU



ID: 4/1/94 - NOPI-328-AD

File: NOPI328A.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI328A.MDI> 4/1/94 - NOPI-328-AD

----- Scan Parameters: ----- Search Parameters: -----
 Radiation = CU_1.540598 Filter length(pts) = 25
 Scan Range = 2- 40 Noise level(sigmas) = 5.0
 Step Size = .02 Intensity cutoff(%) = .5-100
 Count Time = 1 sec. 2-Theta Zero (deg) = 0

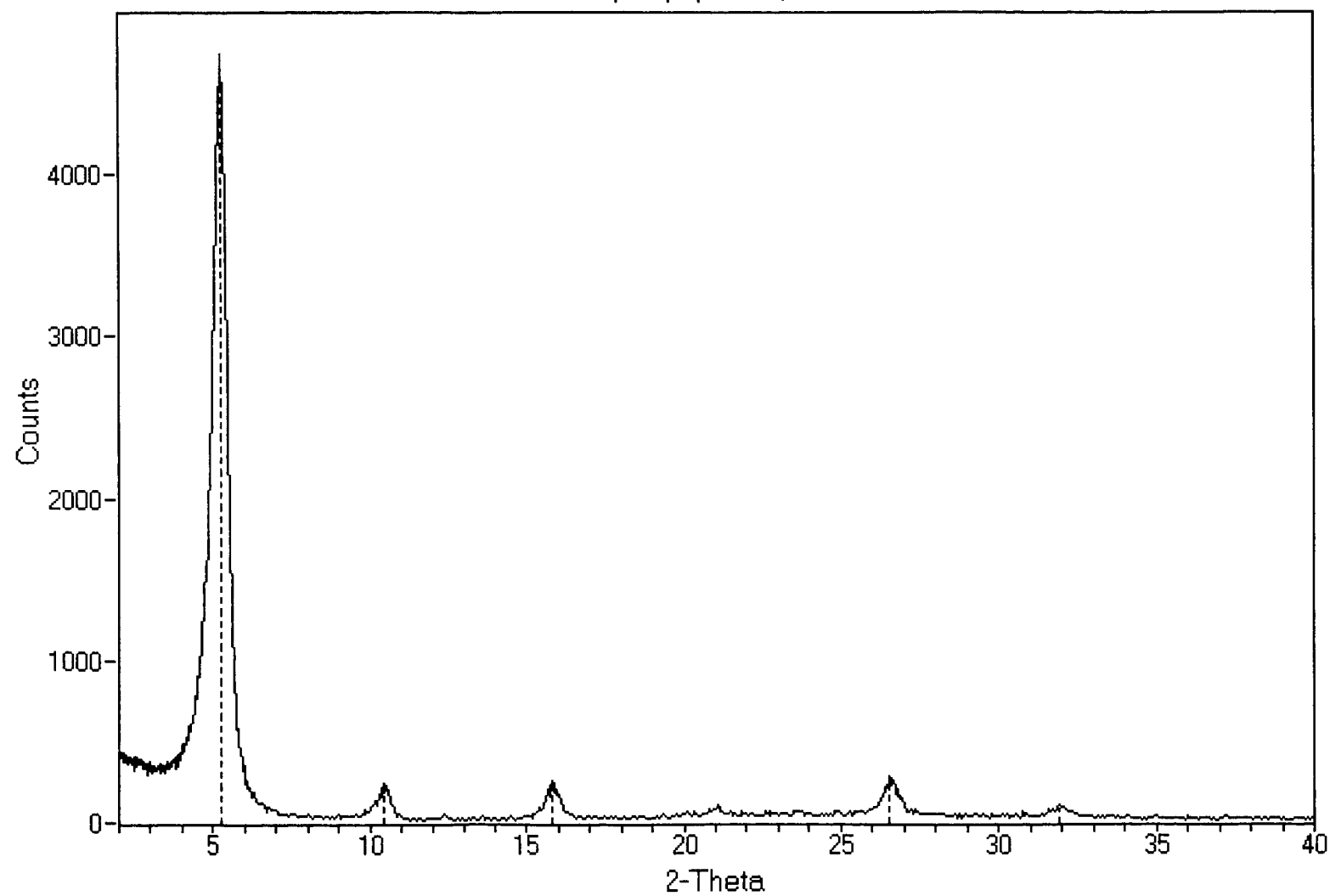
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.200	14.2436	6.197	14.2506	138	1695	97.4	836	68.6	0.444
2:	6.980	12.6546	6.979	12.6551	201	1741	100.0	1218	100.0	0.630
3:	12.379	7.1446	12.381	7.1432	20	57	3.3	7	0.6	0.111
4:	14.198	6.2332	14.198	6.2332	29	68	3.9	17	1.4	0.225
5:	14.419	6.1378	14.410	6.1416	27	82	4.7	24	2.0	0.263
6:	28.760	3.1016	28.765	3.1012	51	157	9.0	95	7.8	0.545

* Intensity values are based on total raw counts.

ID: 4/6/94 - NOPI-328-GLY

File: NOPI328B.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI328B.MDI> 4/6/94 - NOPI-328-GLY

----- Scan Parameters: ----- Search Parameters: -----
 Radiation = CU_1.540598 Filter length(pts) = 25
 Scan Range = 2- 40 Noise level(sigmas) = 5.0
 Step Size = .02 Intensity cutoff(%) = .5-100
 Count Time = 1 sec. 2-Theta Zero (deg) = 0

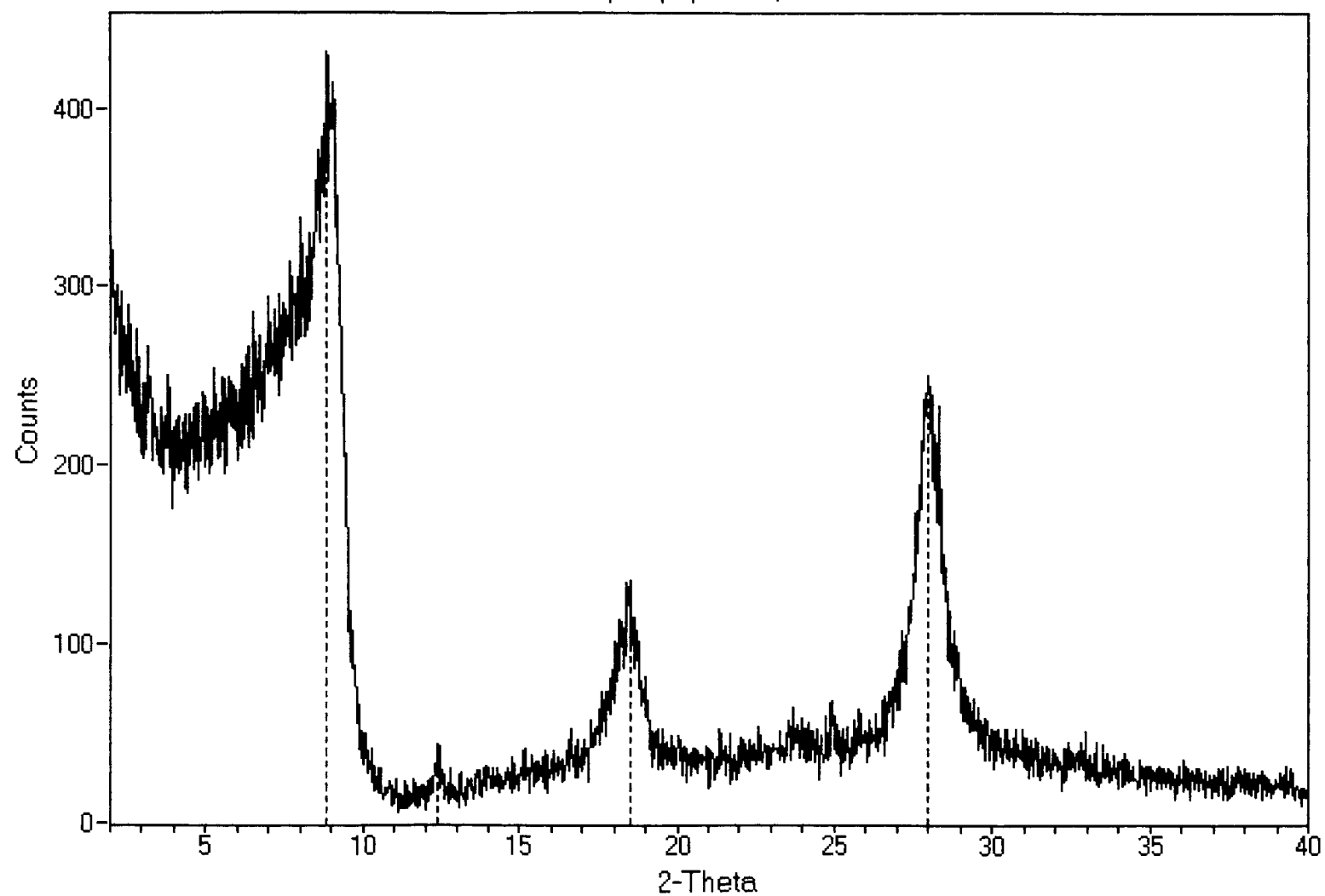
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.240	16.8504	5.228	16.8901	193	4557	100.0	2561	100.0	0.506
2:	10.441	8.4660	10.442	8.4649	29	207	4.5	71	2.8	0.309
3:	15.839	5.5908	15.839	5.5908	21	233	5.1	126	4.9	0.487
4:	26.558	3.3536	26.559	3.3535	44	241	5.3	129	5.0	0.482
5:	31.922	2.8013	31.921	2.8014	35	67	1.5	15	0.6	0.201

* Intensity values are based on total raw counts.

ID: 4/14/94 - NOPI-328-375C

File: NOPI328C.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



===== CNWRA =====

Jade: Peak Listing

Tue Apr 19 1994 @10:17am

File: NOPI328C.MDI> 4/14/94 - NOPI-328-375C

----- Scan Parameters: ----- Search Parameters: -----
Radiation = CU_1.540598 Filter length(pts) = 25
Scan Range = 2- 40 Noise level(sigmas) = 5.0
Step Size = .02 Intensity cutoff(%) = .5-100
Count Time = 1 sec. 2-Theta Zero (deg) = 0

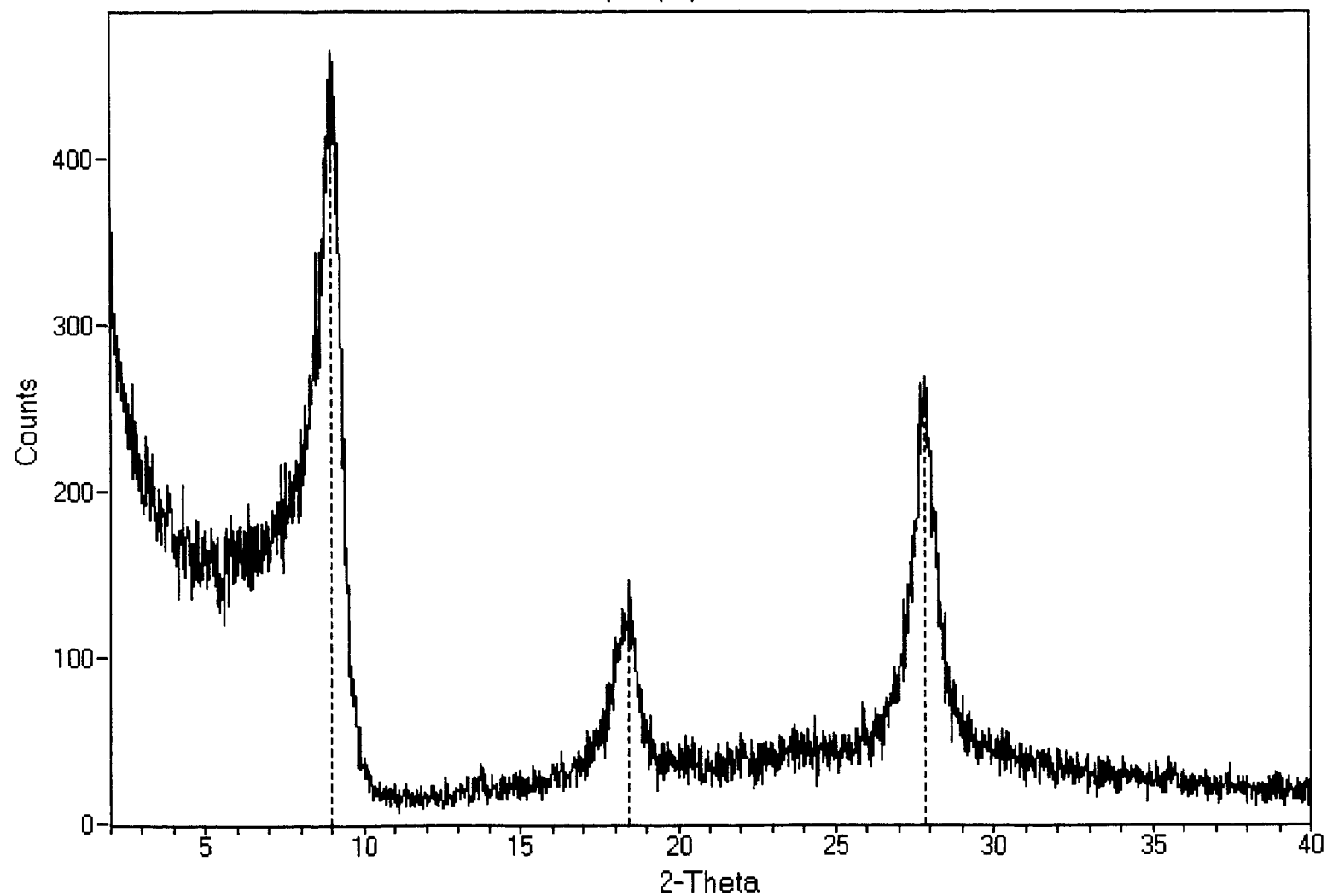
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	8.860	9.9725	8.861	9.9719	150	281	100.0	45	24.3	0.144
2:	12.342	7.1656	12.342	7.1656	14	30	10.7	1	0.5	0.030
3:	18.480	4.7972	18.479	4.7976	33	103	36.7	44	23.8	0.384
4:	27.980	3.1863	27.977	3.1866	43	207	73.7	185	100.0	0.804

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-328-550C

File: NOPI328D.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



===== CNWRA =====

Jade: Peak Listing

Tue Apr 19 1994 @10:19am

File: NOPI328D.MDI> 4/12/94 - NOPI-328-550C

----- Scan Parameters: ----- Search Parameters: -----
Radiation = CU_1.540598 | Filter length(pts) = 25
Scan Range = 2- 40 | Noise level(sigmas) = 5.0
Step Size = .02 | Intensity cutoff(%) = .5-100
Count Time = 1 sec. | 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	8.980	9.8402	8.976	9.8438	104	360	100.0	40	25.0	0.100
2:	18.444	4.8066	18.448	4.8055	31	115	31.9	8	5.0	0.063
3:	27.841	3.2019	27.839	3.2021	43	226	62.8	160	100.0	0.637

* Intensity values are based on total raw counts.

Mathis Vitrophyta

Jade: Peak Listing

Sun Jul 10 1994 @4:13pm

File: NOPI3343.MDI> 6/29/94 - NOPI-334-XRD3

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.54059           || Filter length(pts)   = 25
Scan Range  = 2- 70                || Noise level(sigmas)  = 5.0
Step Size   = .02                  || Intensity cutoff(%)  = .5-100
Count Time  = 2 sec.               || 2-Theta Zero (deg)  = 0
-----

```

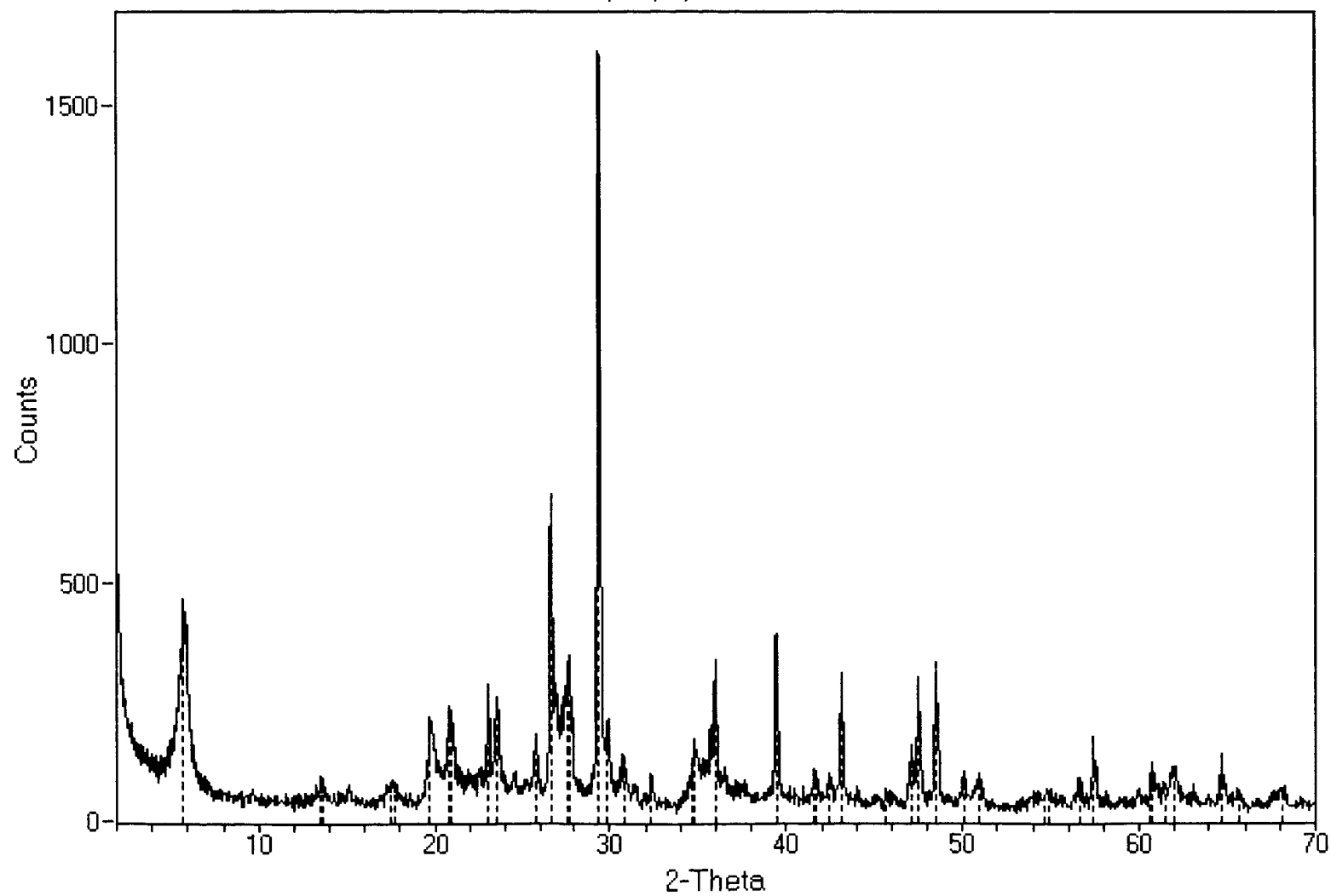
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.758	15.3375	5.762	15.3259	83	347	22.3	191	62.8	0.495
2:	13.526	6.5411	13.526	6.5411	45	41	2.6	4	1.3	0.088
3:	13.616	6.4979	13.616	6.4979	45	48	3.1	2	0.7	0.037
4:	17.460	5.0753	17.464	5.0739	33	48	3.1	12	3.9	0.225
5:	17.680	5.0126	17.680	5.0126	34	42	2.7	3	1.0	0.064
6:	19.738	4.4942	19.739	4.4939	49	158	10.2	43	14.1	0.245
7:	20.838	4.2594	20.838	4.2595	59	181	11.6	54	17.8	0.269
8:	20.901	4.2468	20.900	4.2469	59	149	9.6	27	8.9	0.163
9:	23.040	3.8571	23.039	3.8573	74	213	13.7	32	10.5	0.135
10:	23.520	3.7794	23.514	3.7804	73	188	12.1	48	15.8	0.230
11:	25.702	3.4634	25.706	3.4629	62	109	7.0	21	6.9	0.173
12:	26.598	3.3486	26.593	3.3492	59	628	40.4	133	43.8	0.191
13:	27.622	3.2268	27.641	3.2246	58	275	17.7	44	14.5	0.144
14:	27.720	3.2156	27.720	3.2156	58	241	15.5	60	19.7	0.224
15:	29.381	3.0374	29.386	3.0370	56	1556	100.0	304	100.0	0.176
16:	29.877	2.9882	29.860	2.9899	49	167	10.7	47	15.5	0.253
17:	30.780	2.9025	30.778	2.9027	48	79	5.1	18	5.9	0.205
18:	32.341	2.7659	32.343	2.7657	36	65	4.2	11	3.6	0.152
19:	34.640	2.5874	34.640	2.5874	47	73	4.7	9	3.0	0.111
20:	34.799	2.5760	34.811	2.5751	46	127	8.2	54	17.8	0.383
21:	35.959	2.4955	35.959	2.4955	52	285	18.3	60	19.7	0.189
22:	39.418	2.2841	39.418	2.2841	44	347	22.3	70	23.0	0.182
23:	41.621	2.1681	41.626	2.1679	43	68	4.4	12	3.9	0.159
24:	41.699	2.1643	41.693	2.1646	44	47	3.0	6	2.0	0.115
25:	42.438	2.1283	42.438	2.1283	47	49	3.1	2	0.7	0.037
26:	43.157	2.0945	43.169	2.0939	39	244	15.7	50	16.4	0.184
27:	45.682	1.9844	45.682	1.9844	31	37	2.4	2	0.7	0.049
28:	47.117	1.9273	47.126	1.9269	43	116	7.5	28	9.2	0.217
29:	47.516	1.9120	47.522	1.9118	35	234	15.0	63	20.7	0.242
30:	48.500	1.8755	48.520	1.8748	36	296	19.0	62	20.4	0.189
31:	50.120	1.8186	50.121	1.8186	39	64	4.1	10	3.3	0.141
32:	50.901	1.7925	50.907	1.7923	32	68	4.4	13	4.3	0.172
33:	50.996	1.7894	50.986	1.7897	32	51	3.3	14	4.6	0.247
34:	54.719	1.6761	54.719	1.6761	32	29	1.9	2	0.7	0.062
35:	54.857	1.6722	54.854	1.6723	32	33	2.1	5	1.6	0.136
36:	56.597	1.6249	56.598	1.6249	32	58	3.7	7	2.3	0.109
37:	57.416	1.6036	57.422	1.6035	31	125	8.0	29	9.5	0.209
38:	60.603	1.5267	60.603	1.5267	43	38	2.4	2	0.7	0.047
39:	60.680	1.5250	60.677	1.5250	43	80	5.1	8	2.6	0.090
40:	61.482	1.5070	61.482	1.5070	38	39	2.5	2	0.7	0.046
41:	61.942	1.4969	61.936	1.4970	39	75	4.8	27	8.9	0.324
42:	64.678	1.4400	64.675	1.4401	32	90	5.8	17	5.6	0.170
43:	65.637	1.4213	65.631	1.4214	29	46	3.0	5	1.6	0.098

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
44:	68.163	1.3746	68.153	1.3748	28	41	2.6	12	3.9	0.263

Intensity values are based on total raw counts.

ID: 6/29/94 - NOPI-334-XRD3

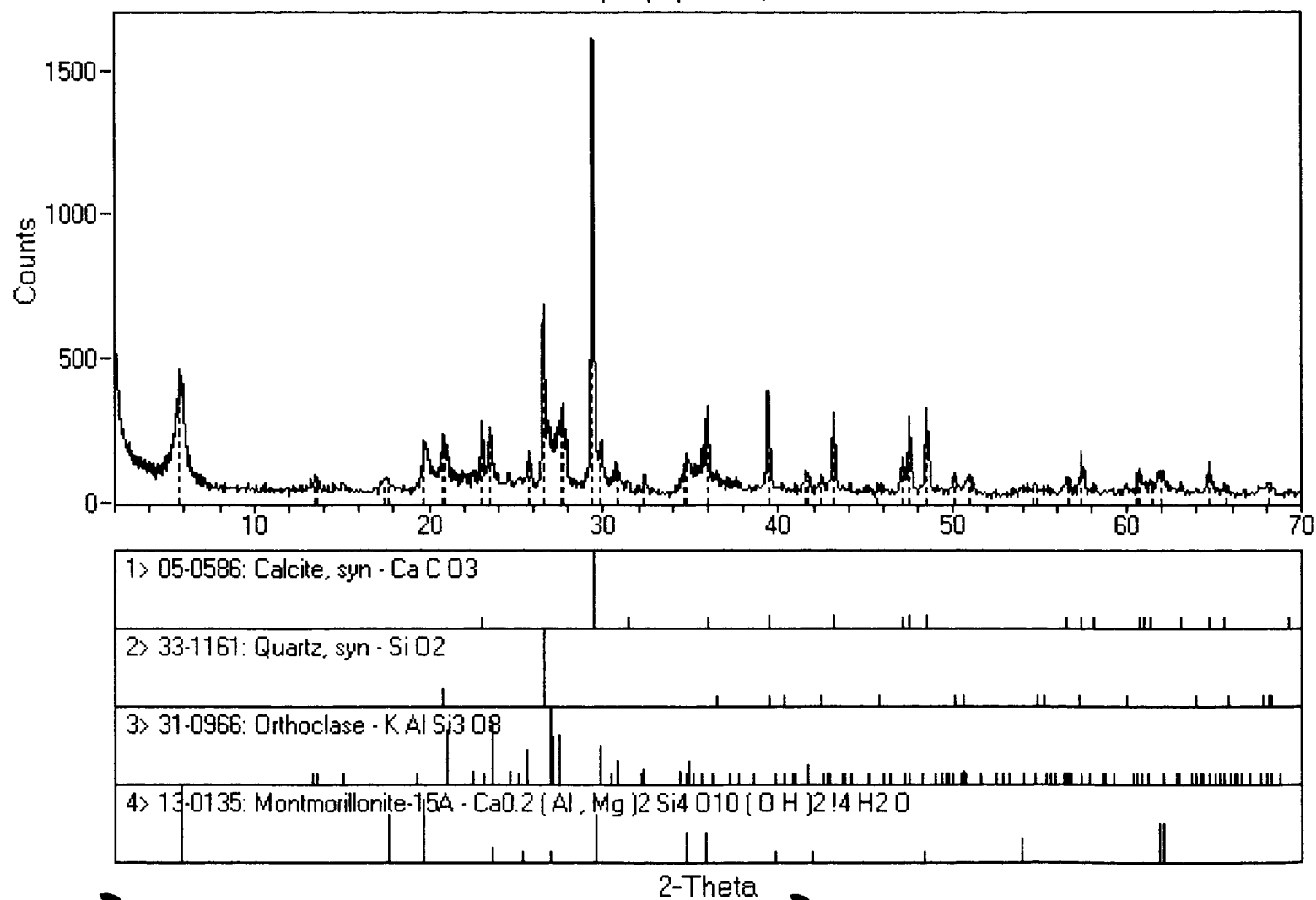
File: NOPI3343.MDI Scan: 2-70/.02/ 2/#3401, Anode: CU



ID: 6/29/94 - NOPI-334-XRD3

File: NOPI3343.MDI

Scan: 2-70/.02/ 2/#3401, Anode: CU



Jade: Peak Listing

Sun Jul 10 1994 @4:09pm

File: NOPI3342.MDI> 7/6/94 - NOPI-334-XRD2

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.54059           || Filter length(pts)   = 25
Scan Range  = 2- 70                || Noise level(sigmas)  = 5.0
Step Size   = .02                  || Intensity cutoff(%)  = .5-100
Count Time  = 2 sec.               || 2-Theta Zero (deg)   = 0
-----

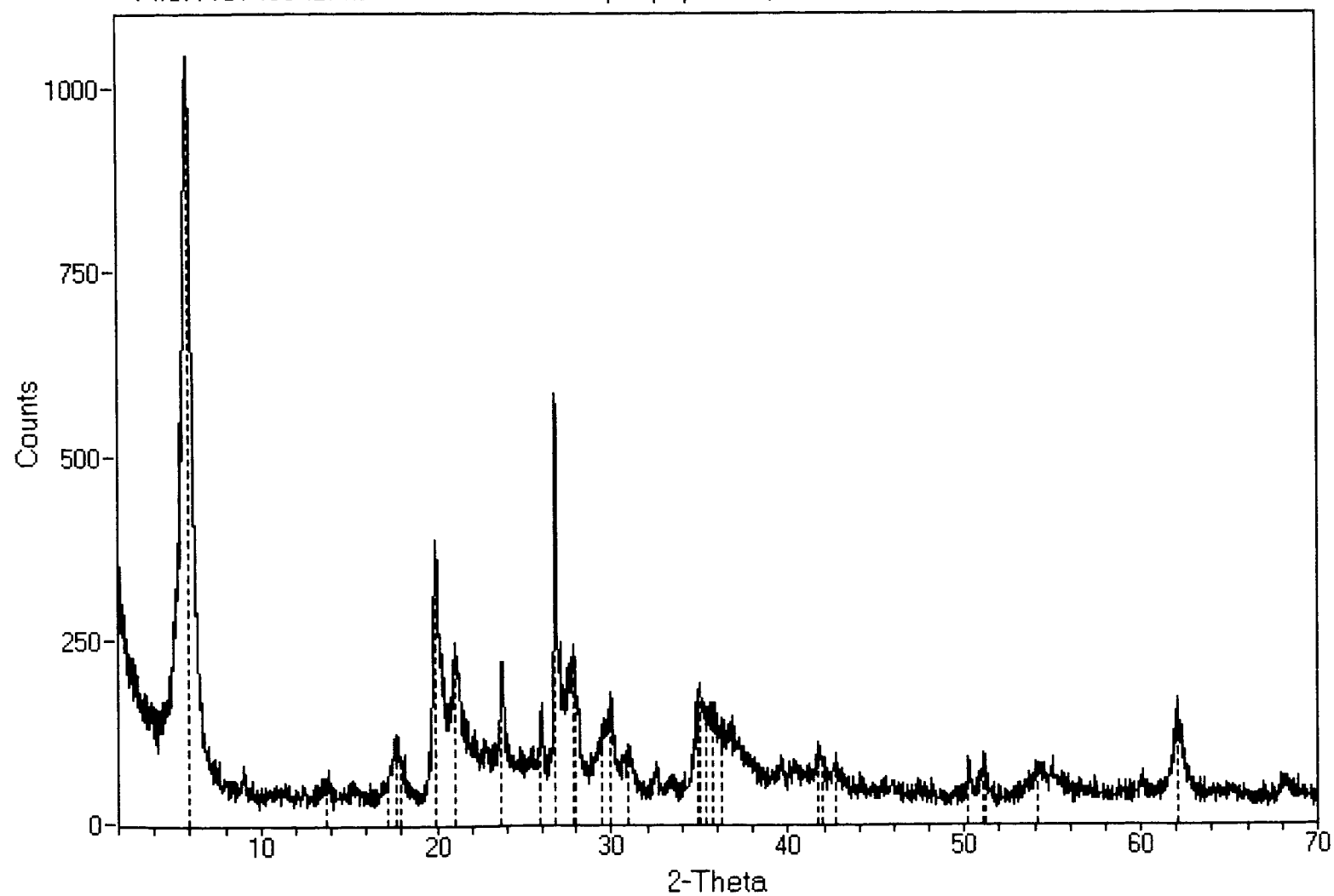
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.940	14.8658	5.929	14.8956	90	936	100.0	644	100.0	0.619
2:	5.999	14.7213	5.999	14.7219	89	892	95.3	393	61.0	0.397
3:	13.735	6.4419	13.735	6.4419	32	32	3.4	3	0.5	0.084
4:	17.263	5.1327	17.263	5.1327	30	34	3.6	3	0.5	0.079
5:	17.640	5.0237	17.634	5.0255	30	85	9.1	14	2.2	0.148
6:	17.761	4.9898	17.761	4.9898	30	92	9.8	39	6.1	0.382
7:	17.920	4.9460	17.914	4.9477	30	63	6.7	15	2.3	0.214
8:	19.940	4.4493	19.946	4.4478	55	330	35.3	105	16.3	0.286
9:	21.060	4.2150	21.060	4.2150	56	181	19.3	49	7.6	0.244
10:	23.680	3.7542	23.691	3.7526	75	146	15.6	32	5.0	0.197
11:	25.882	3.4396	25.885	3.4392	67	84	9.0	11	1.7	0.118
12:	26.781	3.3262	26.793	3.3247	68	516	55.1	106	16.5	0.185
13:	27.801	3.2064	27.800	3.2065	67	175	18.7	89	13.8	0.458
14:	27.940	3.1908	27.940	3.1908	67	159	17.0	37	5.7	0.209
15:	29.500	3.0255	29.500	3.0255	62	72	7.7	8	1.2	0.100
16:	29.982	2.9780	29.981	2.9781	54	123	13.1	28	4.3	0.205
17:	30.937	2.8882	30.937	2.8882	53	54	5.8	3	0.5	0.050
18:	34.905	2.5684	34.933	2.5664	69	112	12.0	40	6.2	0.321
19:	34.981	2.5630	34.983	2.5629	71	102	10.9	36	5.6	0.318
20:	35.320	2.5391	35.320	2.5392	67	84	9.0	48	7.5	0.514
21:	35.740	2.5103	35.740	2.5103	63	99	10.6	27	4.2	0.245
22:	36.222	2.4780	36.221	2.4780	57	86	9.2	10	1.6	0.105
23:	41.739	2.1623	41.740	2.1622	50	59	6.3	6	0.9	0.092
24:	41.897	2.1545	41.897	2.1545	49	41	4.4	4	0.6	0.088
25:	42.639	2.1187	42.639	2.1187	50	46	4.9	4	0.6	0.078
26:	50.261	1.8138	50.261	1.8138	31	57	6.1	6	0.9	0.095
27:	51.059	1.7873	51.059	1.7873	30	62	6.6	6	0.9	0.087
28:	51.157	1.7842	51.156	1.7842	30	56	6.0	9	1.4	0.145
29:	54.139	1.6927	54.134	1.6928	32	45	4.8	7	1.1	0.140
30:	62.059	1.4943	62.060	1.4943	40	128	13.7	45	7.0	0.316

* Intensity values are based on total raw counts.

ID: 7/6/94 - NOPI-334-XRD2

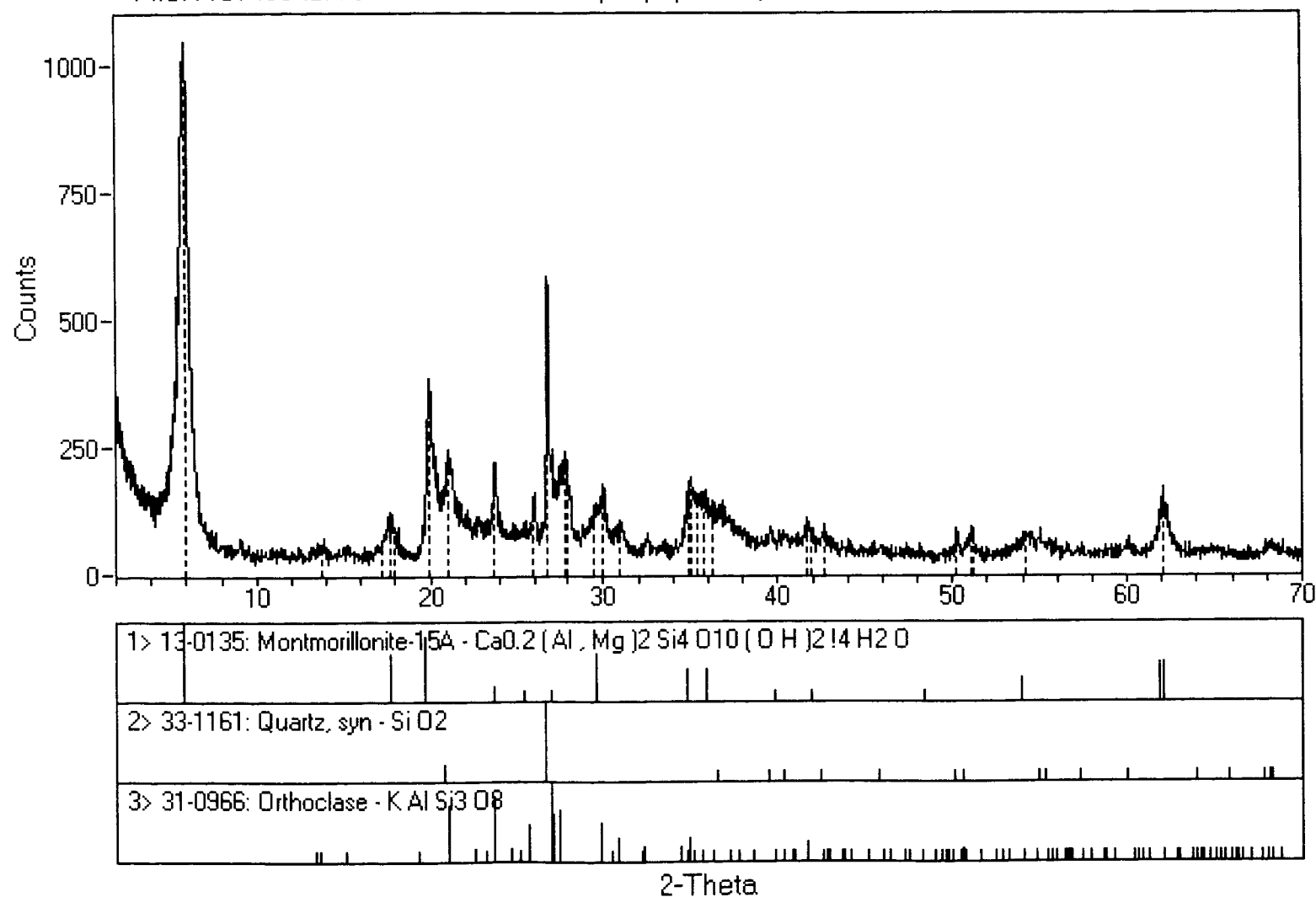
File: NOPI3342.MDI Scan: 2-70/.02/ 2/#3401, Anode: CU



ID: 7/6/94 - NOPI-334-XRD2

File: NOPI3342.MDI

Scan: 2-70/.02/ 2/#3401, Anode: CU



Jade: Peak Listing

Sun Jul 10 1994 @4:02pm

File: NOPI3341.MDI> 7/5/94 - NOPI-334-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.54059           Filter length(pts) = 25
Scan Range  = 2- 70                Noise level(sigmas) = 5.0
Step Size   = .02                  Intensity cutoff(%) = .5-100
Count Time  = 2 sec.               2-Theta Zero (deg) = 0
    
```

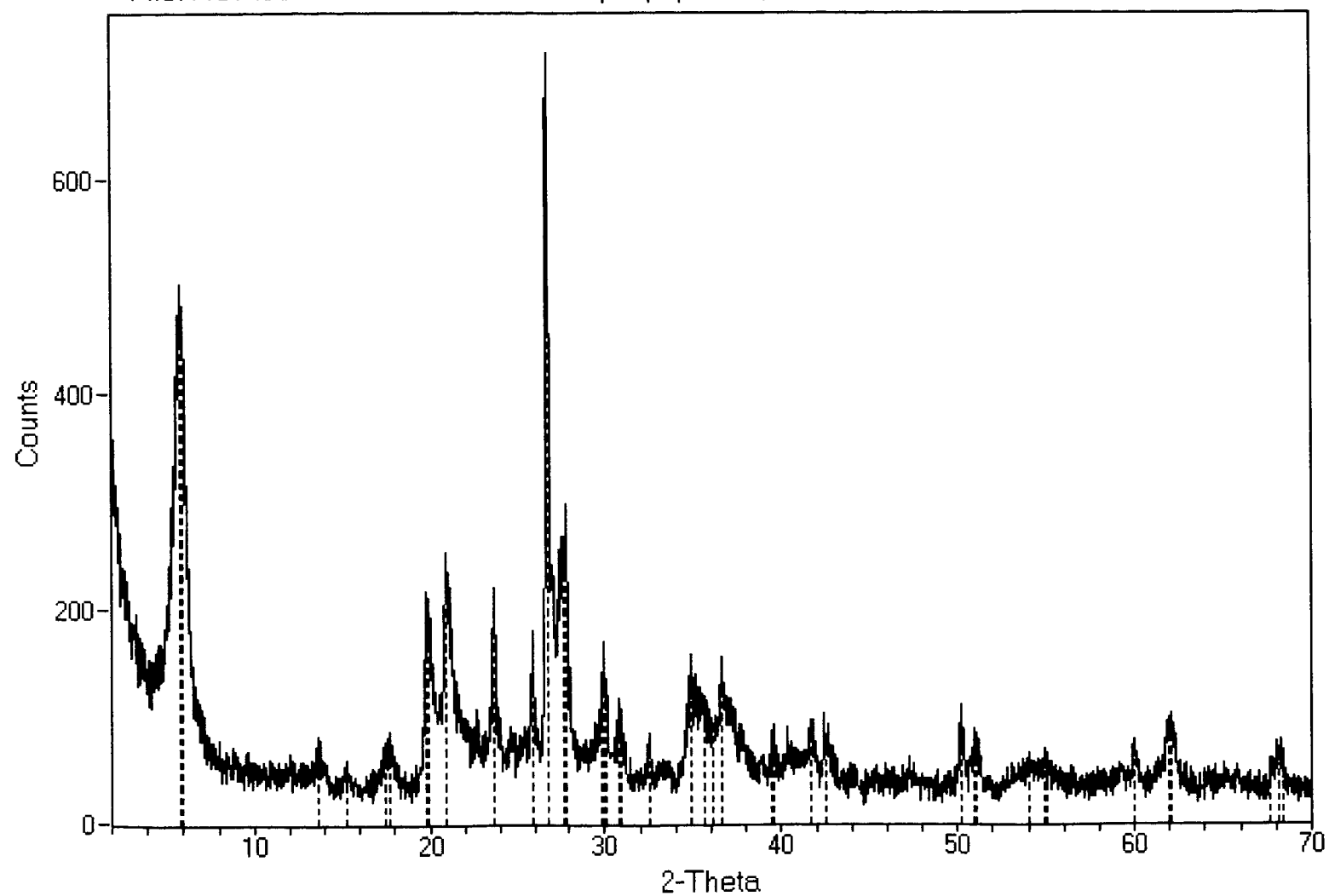
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.801	15.2219	5.800	15.2246	97	405	61.6	274	100.0	0.609
2:	5.900	14.9672	5.900	14.9671	96	376	57.1	179	65.3	0.428
3:	13.601	6.5051	13.601	6.5051	34	48	7.3	2	0.7	0.037
4:	13.682	6.4670	13.682	6.4670	33	48	7.3	4	1.5	0.075
5:	15.180	5.8320	15.180	5.8320	30	30	4.6	1	0.4	0.030
6:	17.515	5.0593	17.515	5.0593	32	38	5.8	2	0.7	0.047
7:	17.758	4.9908	17.758	4.9908	32	40	6.1	2	0.7	0.045
8:	19.862	4.4665	19.860	4.4669	51	165	25.1	46	16.8	0.251
9:	19.917	4.4543	19.917	4.4543	52	128	19.5	60	21.9	0.422
10:	20.939	4.2391	20.939	4.2392	55	194	29.5	63	23.0	0.292
11:	23.582	3.7696	23.595	3.7677	64	155	23.6	27	9.9	0.157
12:	25.821	3.4477	25.820	3.4477	64	98	14.9	13	4.7	0.119
13:	26.718	3.3339	26.711	3.3347	60	658	100.0	162	59.1	0.222
14:	27.763	3.2108	27.762	3.2108	61	197	29.9	79	28.8	0.361
15:	27.800	3.2066	27.781	3.2087	61	218	33.1	85	31.0	0.351
16:	29.862	2.9897	29.863	2.9895	53	87	13.2	16	5.8	0.166
17:	29.960	2.9801	29.961	2.9800	52	117	17.8	27	9.9	0.208
18:	30.020	2.9742	30.007	2.9756	52	82	12.5	29	10.6	0.318
19:	30.860	2.8952	30.865	2.8948	42	66	10.0	8	2.9	0.109
20:	30.915	2.8902	30.908	2.8908	41	63	9.6	7	2.6	0.100
21:	32.478	2.7546	32.478	2.7546	35	49	7.4	2	0.7	0.037
22:	34.841	2.5729	34.845	2.5727	57	86	13.1	22	8.0	0.230
23:	34.898	2.5689	34.893	2.5693	58	86	13.1	16	5.8	0.167
24:	35.578	2.5213	35.574	2.5216	47	72	10.9	12	4.4	0.150
25:	36.178	2.4809	36.178	2.4809	54	38	5.8	2	0.7	0.047
26:	36.642	2.4505	36.641	2.4506	75	72	10.9	8	2.9	0.100
27:	39.522	2.2784	39.522	2.2784	42	40	6.1	2	0.7	0.045
28:	39.561	2.2762	39.564	2.2760	42	50	7.6	6	2.2	0.108
29:	41.701	2.1642	41.697	2.1644	39	57	8.7	8	2.9	0.126
30:	42.541	2.1234	42.541	2.1234	40	32	4.9	2	0.7	0.056
31:	50.198	1.8159	50.202	1.8158	30	80	12.2	17	6.2	0.191
32:	51.020	1.7886	51.021	1.7886	29	59	9.0	7	2.6	0.107
33:	51.078	1.7867	51.075	1.7868	29	54	8.2	10	3.6	0.167
34:	53.999	1.6967	53.999	1.6967	31	34	5.2	1	0.4	0.026
35:	54.920	1.6705	54.920	1.6705	30	39	5.9	2	0.7	0.046
36:	55.017	1.6678	55.017	1.6678	30	35	5.3	2	0.7	0.051
37:	59.978	1.5411	59.978	1.5411	31	43	6.5	5	1.8	0.105
38:	61.940	1.4969	61.941	1.4969	31	64	9.7	22	8.0	0.309
39:	62.097	1.4935	62.097	1.4935	30	67	10.2	16	5.8	0.215
40:	67.702	1.3828	67.702	1.3828	28	32	4.9	2	0.7	0.056
41:	68.177	1.3744	68.176	1.3744	28	29	4.4	6	2.2	0.186
42:	68.343	1.3714	68.343	1.3714	28	40	6.1	3	1.1	0.067

* Intensity values are based on total raw counts.

ID: 7/5/94 - NOPI-334-XRD1

File: NOPI3341.MDI

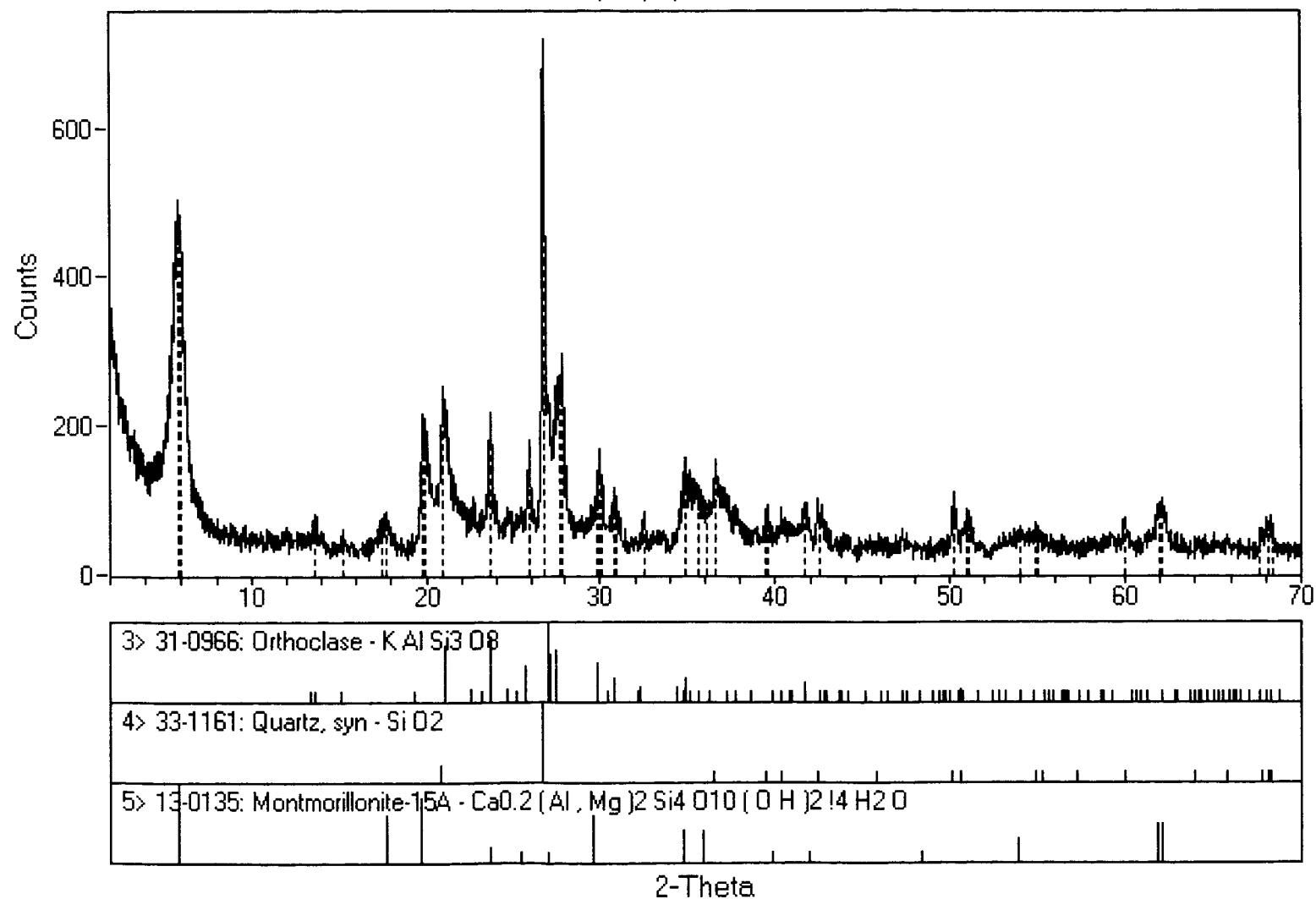
Scan: 2-70/.02/ 2/#3401, Anode: CU



ID: 7/5/94 - NOPI-334-XRD1

File: NOPI3341.MDI

Scan: 2-70/.02/ 2/#3401, Anode: CU



Jade: Peak Listing

Sun Jul 10 1994 @3:44pm

File: NOPI3631.MDI> 7/8/94 - NOPI-363-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.54059           Filter length(pts) = 25
Scan Range  = 2- 70                Noise level(sigmas) = 5.0
Step Size   = .02                  Intensity cutoff(%) = .5-100
Count Time  = 2 sec.               2-Theta Zero (deg) = 0
    
```

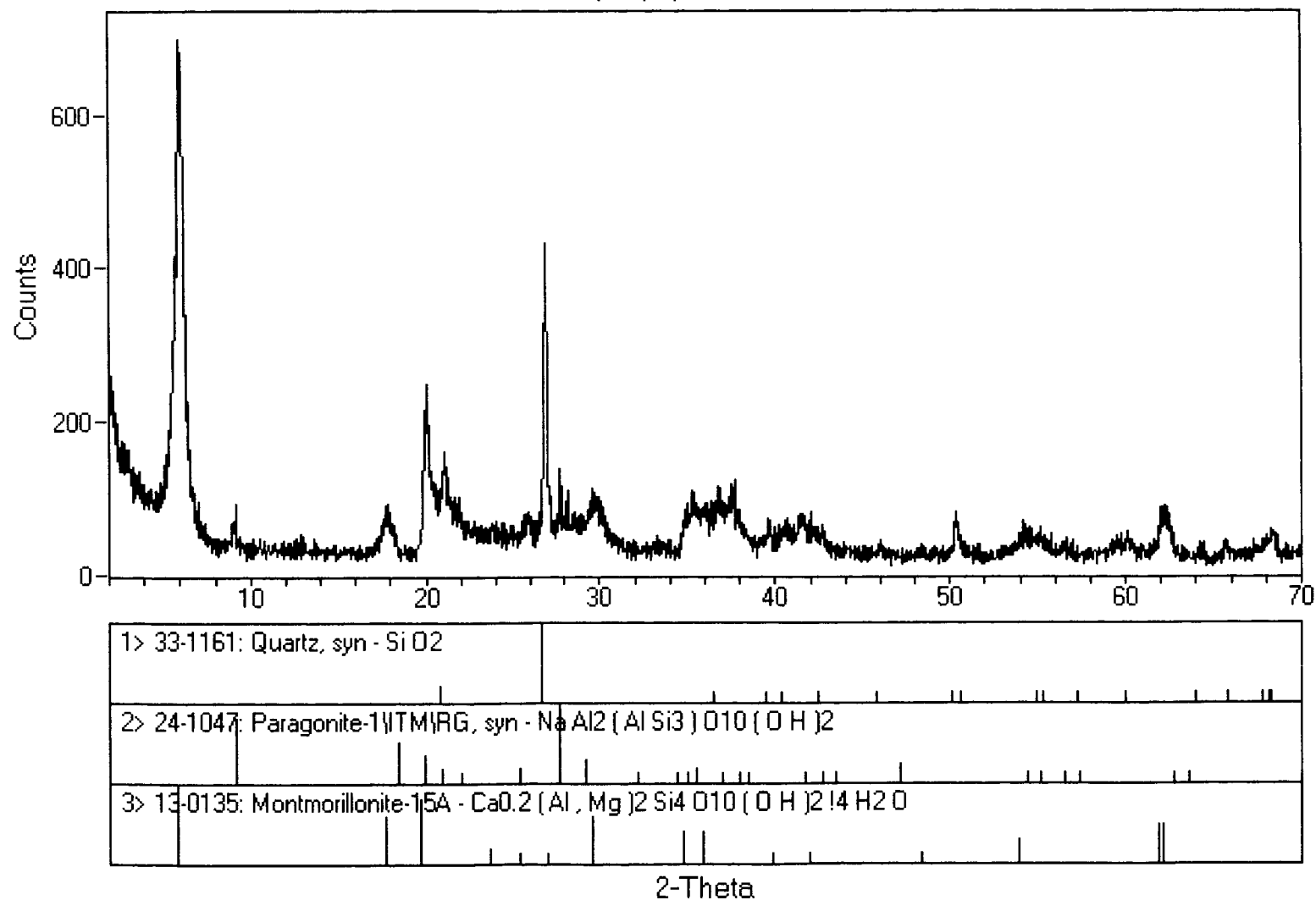
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.040	14.6211	6.039	14.6222	70	611	100.0	274	100.0	0.404
2:	9.038	9.7763	9.038	9.7763	32	35	5.7	2	0.7	0.051
3:	9.156	9.6508	9.156	9.6508	32	54	8.8	4	1.5	0.067
4:	17.519	5.0582	17.519	5.0581	29	40	6.5	4	1.5	0.090
5:	17.719	5.0014	17.720	5.0014	28	62	10.1	9	3.3	0.131
6:	17.819	4.9737	17.820	4.9736	28	64	10.5	14	5.1	0.197
7:	18.257	4.8554	18.257	4.8554	28	26	4.3	1	0.4	0.035
8:	20.002	4.4356	20.009	4.4339	43	184	30.1	59	21.5	0.289
9:	21.021	4.2228	21.020	4.2229	40	121	19.8	36	13.1	0.268
10:	21.117	4.2037	21.118	4.2035	40	101	16.5	13	4.7	0.116
11:	26.857	3.3169	26.848	3.3180	56	376	61.5	81	29.6	0.194
12:	27.719	3.2157	27.719	3.2157	64	75	12.3	3	1.1	0.036
13:	27.760	3.2110	27.751	3.2121	64	58	9.5	5	1.8	0.078
14:	28.196	3.1624	28.196	3.1624	65	44	7.2	2	0.7	0.041
15:	29.600	3.0155	29.600	3.0155	55	58	9.5	3	1.1	0.047
16:	29.718	3.0038	29.718	3.0038	53	55	9.0	4	1.5	0.065
17:	30.119	2.9647	30.119	2.9647	50	41	6.7	2	0.7	0.044
18:	34.959	2.5646	34.959	2.5646	44	41	6.7	2	0.7	0.044
19:	35.276	2.5422	35.276	2.5422	51	37	6.1	2	0.7	0.049
20:	36.703	2.4466	36.703	2.4466	45	70	11.5	3	1.1	0.039
21:	36.861	2.4365	36.861	2.4365	62	52	8.5	3	1.1	0.052
22:	37.523	2.3950	37.523	2.3950	53	66	10.8	5	1.8	0.068
23:	37.640	2.3878	37.640	2.3878	51	56	9.2	3	1.1	0.048
24:	39.642	2.2717	39.642	2.2717	40	33	5.4	1	0.4	0.027
25:	41.481	2.1751	41.481	2.1751	35	43	7.0	2	0.7	0.042
26:	41.578	2.1703	41.576	2.1704	35	44	7.2	10	3.6	0.205
27:	46.000	1.9714	46.000	1.9714	21	24	3.9	1	0.4	0.037
28:	50.340	1.8112	50.341	1.8111	20	55	9.0	12	4.4	0.196
29:	54.079	1.6944	54.079	1.6944	25	25	4.1	1	0.4	0.036
30:	54.402	1.6851	54.402	1.6851	26	33	5.4	2	0.7	0.055
31:	62.000	1.4956	62.000	1.4956	24	64	10.5	6	2.2	0.084
32:	62.081	1.4939	62.089	1.4937	24	65	10.6	9	3.3	0.125
33:	62.200	1.4913	62.200	1.4913	24	66	10.8	7	2.6	0.095
34:	68.399	1.3705	68.393	1.3706	24	29	4.7	5	1.8	0.155

* Intensity values are based on total raw counts.

ID: 7/8/94 - NOPI-363-XRD1

File: NOPI3631.MDI

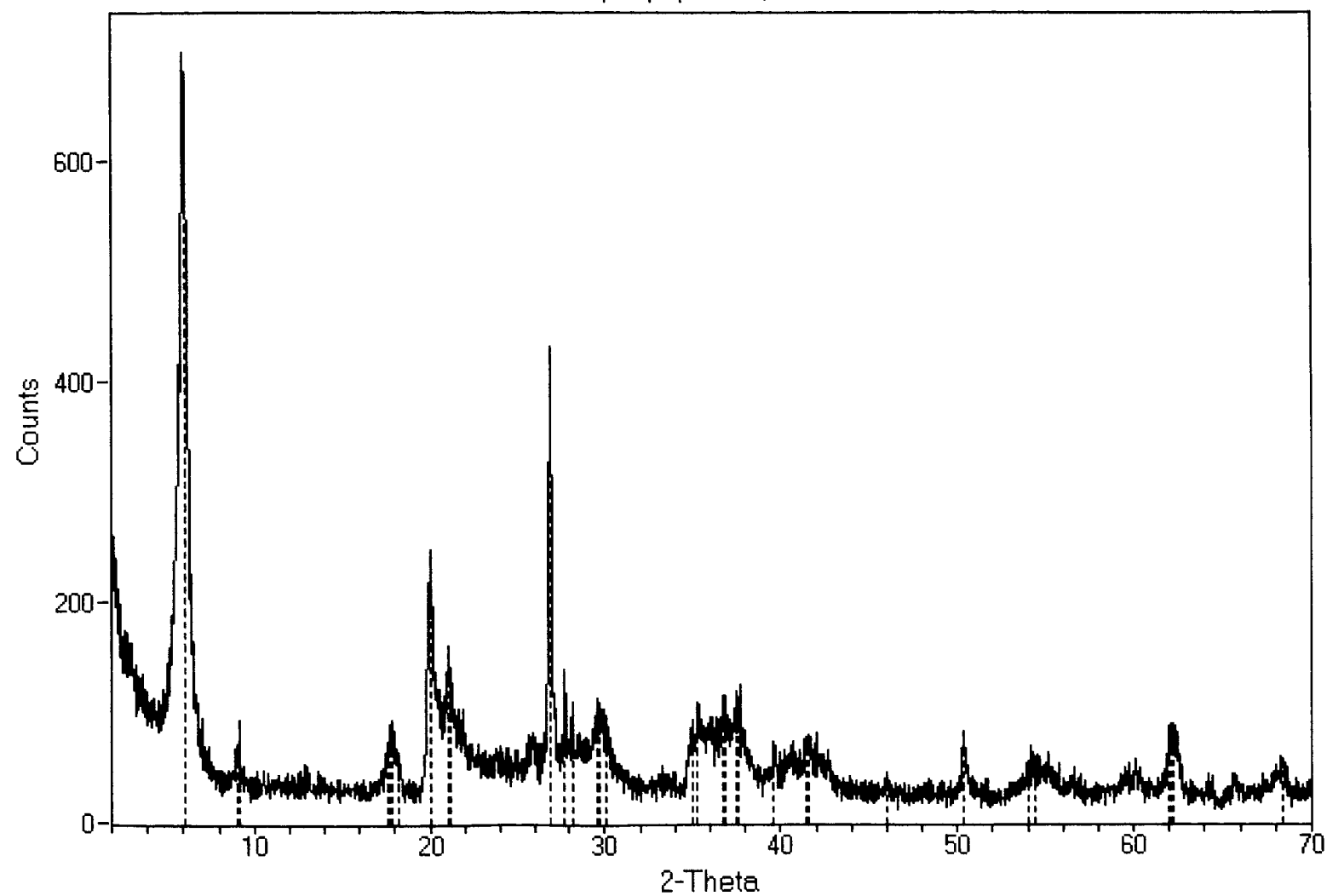
Scan: 2-70/.02/ 2/#3401, Anode: CU



ID: 7/8/94 - NOPI-363-XRD1

File: NOPI3631.MDI

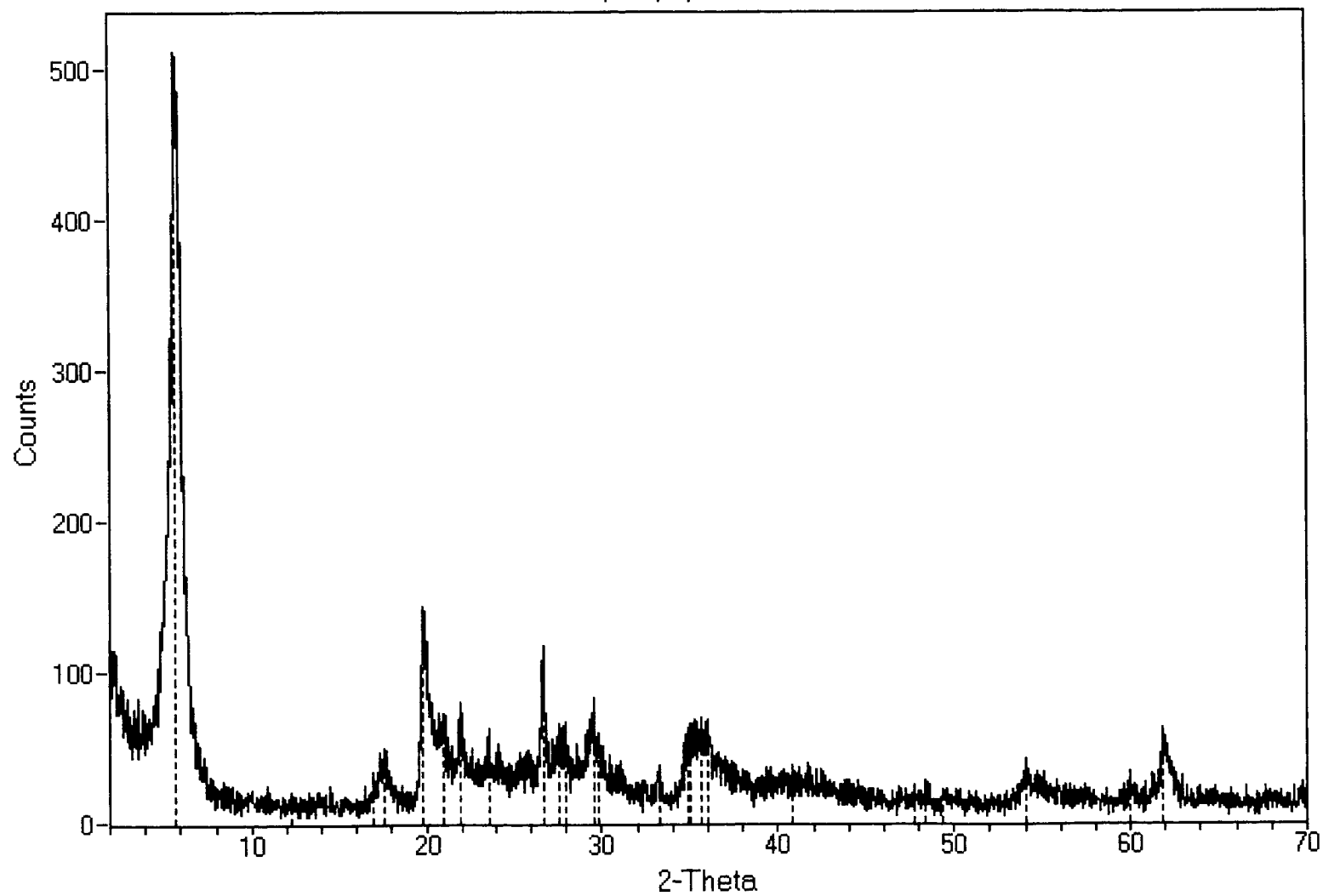
Scan: 2-70/.02/ 2/#3401, Anode: CU



ID: 4/13/94 - NOPI-331-XRD1

File: NOPI3311.MDI

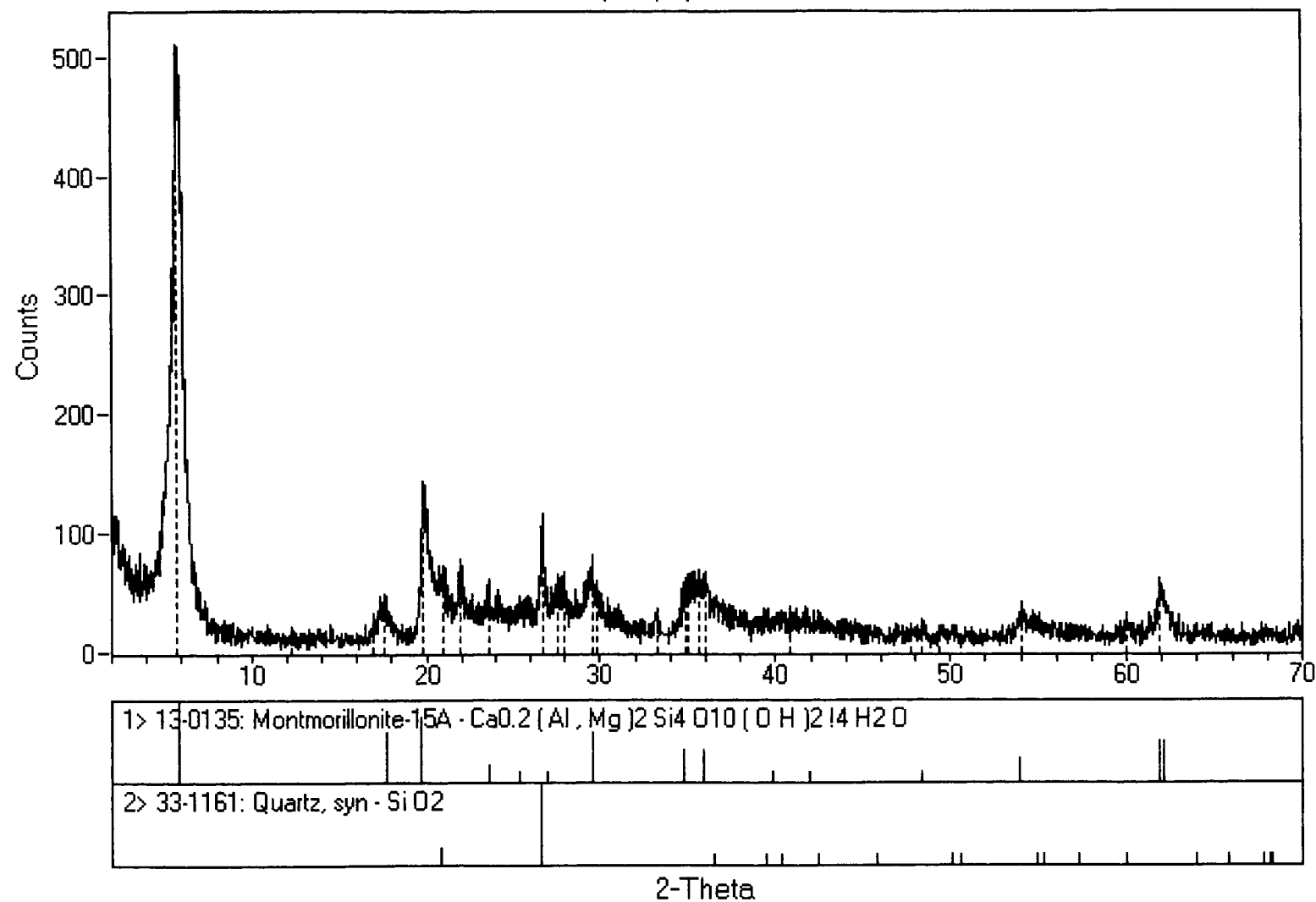
Scan: 2- 70/ .02/ 1/#3401, Anode: CU



ID: 4/13/94 - NOPI-331-XRD1

File: NOPI3311.MDI

Scan: 2- 70/.02/ 1/#3401, Anode: CU



File: NOPI3311.MDI> 4/13/94 - NOPI-331-XRD1

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           Filter length(pts) = 25
Scan Range  = 2- 70                 Noise level(sigmas) = 5.0
Step Size   = .02                   Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                2-Theta Zero (deg) = 0
-----
```

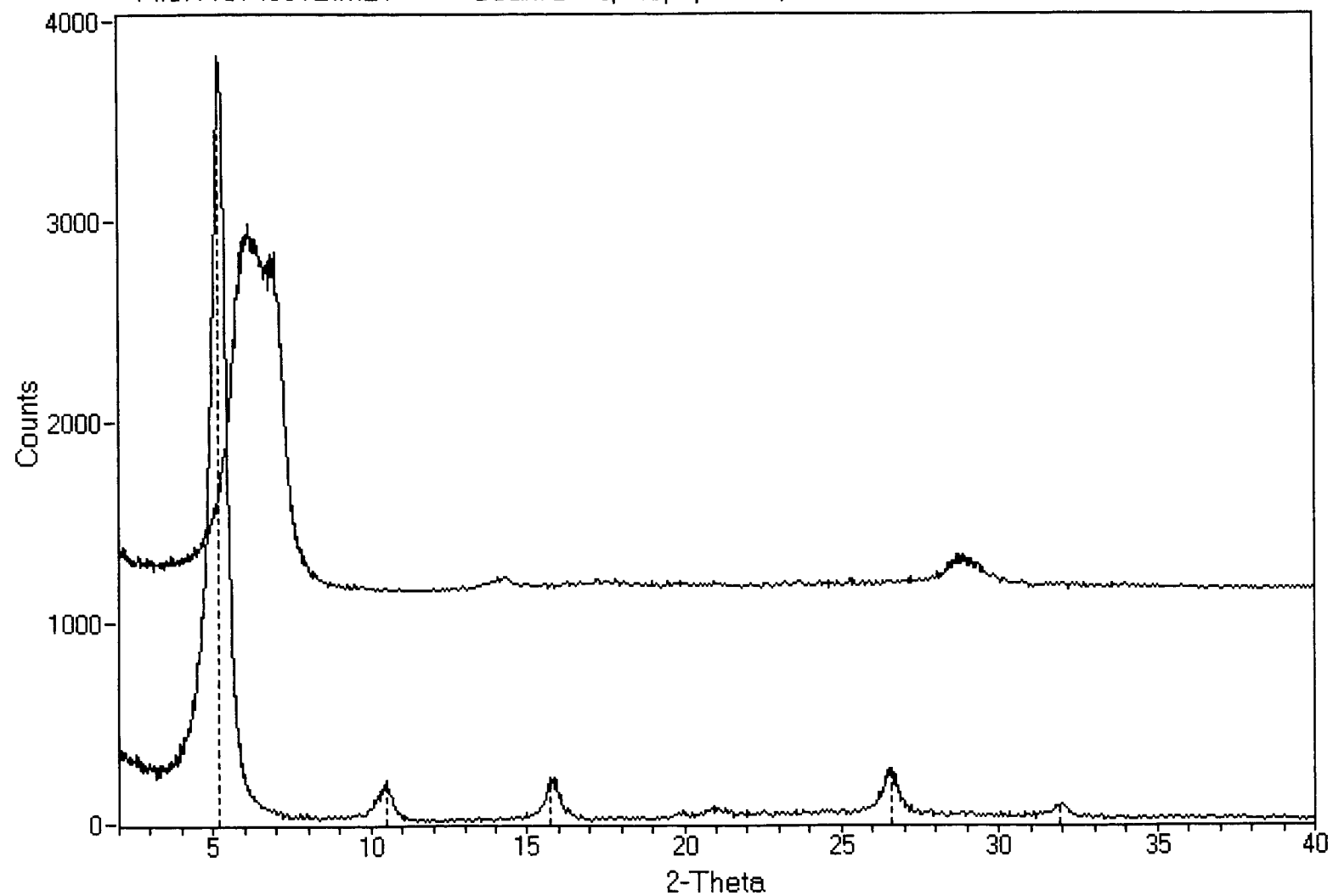
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.760	15.3302	5.760	15.3309	38	473	100.0	210	100.0	0.400
2:	12.318	7.1799	12.318	7.1799	7	14	3.0	1	0.5	0.064
3:	16.923	5.2350	16.923	5.2350	10	23	4.9	1	0.5	0.039
4:	17.600	5.0351	17.599	5.0355	11	38	8.0	6	2.9	0.142
5:	19.841	4.4713	19.844	4.4705	18	126	26.6	37	17.6	0.264
6:	20.898	4.2472	20.898	4.2472	28	45	9.5	3	1.4	0.060
7:	21.898	4.0556	21.898	4.0556	32	47	9.9	2	1.0	0.038
8:	23.584	3.7693	23.584	3.7693	30	32	6.8	1	0.5	0.028
9:	26.682	3.3383	26.679	3.3386	29	88	18.6	15	7.1	0.153
10:	27.638	3.2249	27.638	3.2249	31	34	7.2	2	1.0	0.053
11:	27.975	3.1869	27.975	3.1869	31	36	7.6	3	1.4	0.075
12:	29.558	3.0197	29.559	3.0196	26	56	11.8	5	2.4	0.080
13:	29.781	2.9976	29.781	2.9976	25	35	7.4	3	1.4	0.077
14:	33.236	2.6935	33.236	2.6935	15	22	4.7	1	0.5	0.041
15:	34.920	2.5673	34.916	2.5676	21	41	8.7	6	2.9	0.132
16:	35.022	2.5601	35.022	2.5601	21	44	9.3	3	1.4	0.061
17:	35.598	2.5200	35.602	2.5197	20	50	10.6	14	6.7	0.252
18:	36.000	2.4928	36.001	2.4927	20	48	10.1	13	6.2	0.244
19:	40.818	2.2090	40.818	2.2090	17	21	4.4	1	0.5	0.043
20:	47.762	1.9027	47.762	1.9027	9	15	3.2	1	0.5	0.060
21:	48.383	1.8797	48.383	1.8797	8	20	4.2	1	0.5	0.045
22:	49.381	1.8441	49.381	1.8441	8	14	3.0	1	0.5	0.064
23:	54.022	1.6961	54.022	1.6961	14	28	5.9	1	0.5	0.032
24:	59.961	1.5415	59.961	1.5415	13	20	4.2	1	0.5	0.045
25:	61.816	1.4996	61.820	1.4995	14	48	10.1	8	3.8	0.150

* Intensity values are based on total raw counts.

ID: 4/6/94 - NOPI-331-GLY

File: NOPI331B.MDI

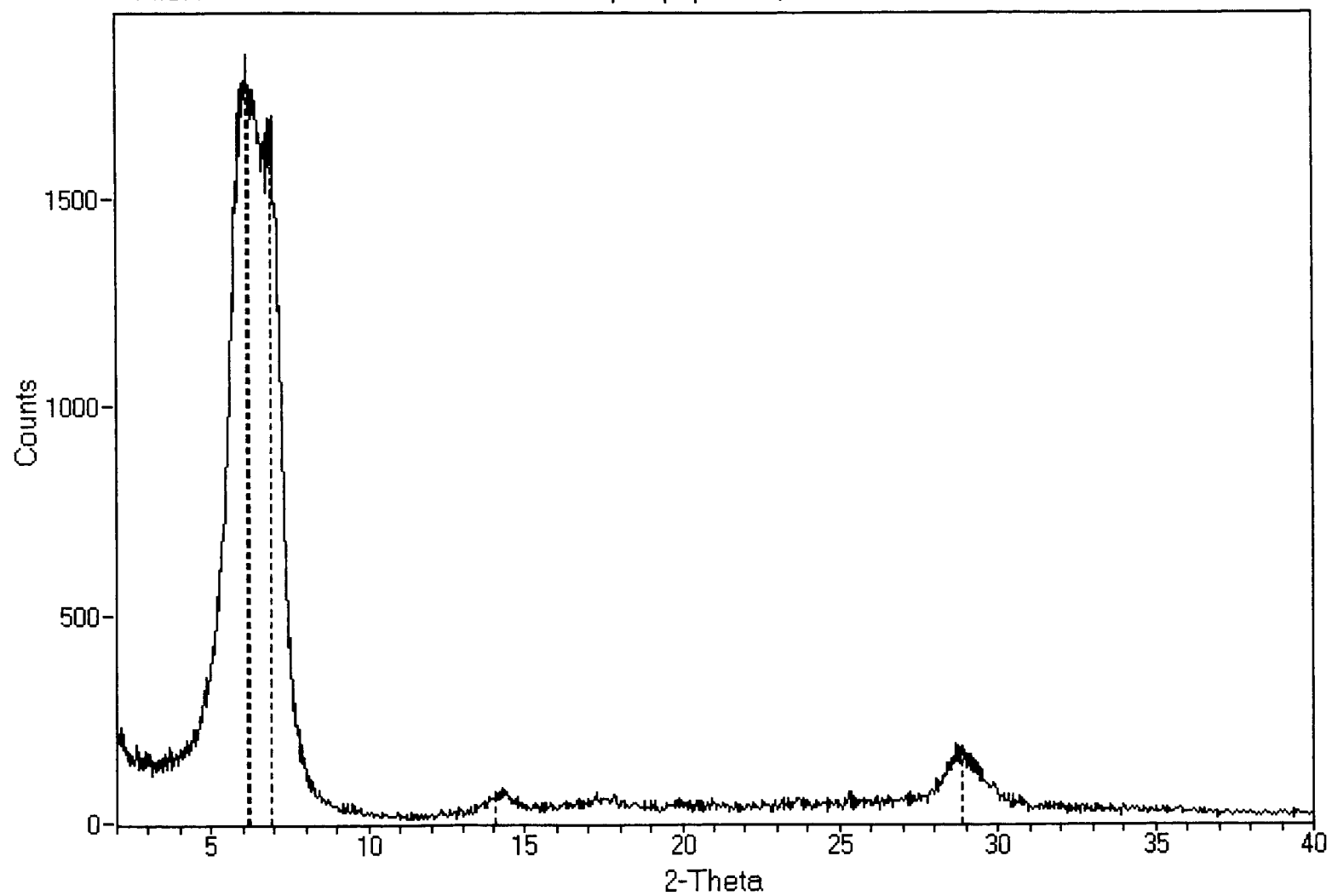
Scan: 2- 40/ .02/ 1/#1901, Anode: CU



ID: 4/1/94-NOPI-331-AD

File: NOPI331A.MDI

Scan: 2- 40/.02/1/#1901, Anode: CU



Jade: Peak Listing

Tue Apr 05 1994 @9:57am

File: NOPI331A.MDI> 4/1/94 - NOPI-331-AD

----- Scan Parameters: -----

Radiation = CU_1.540598

Scan Range = 2- 40

Step Size = .02

Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25

Noise level(sigmas) = 5.0

Intensity cutoff(%) = .5-100

2-Theta Zero (degs) = 0

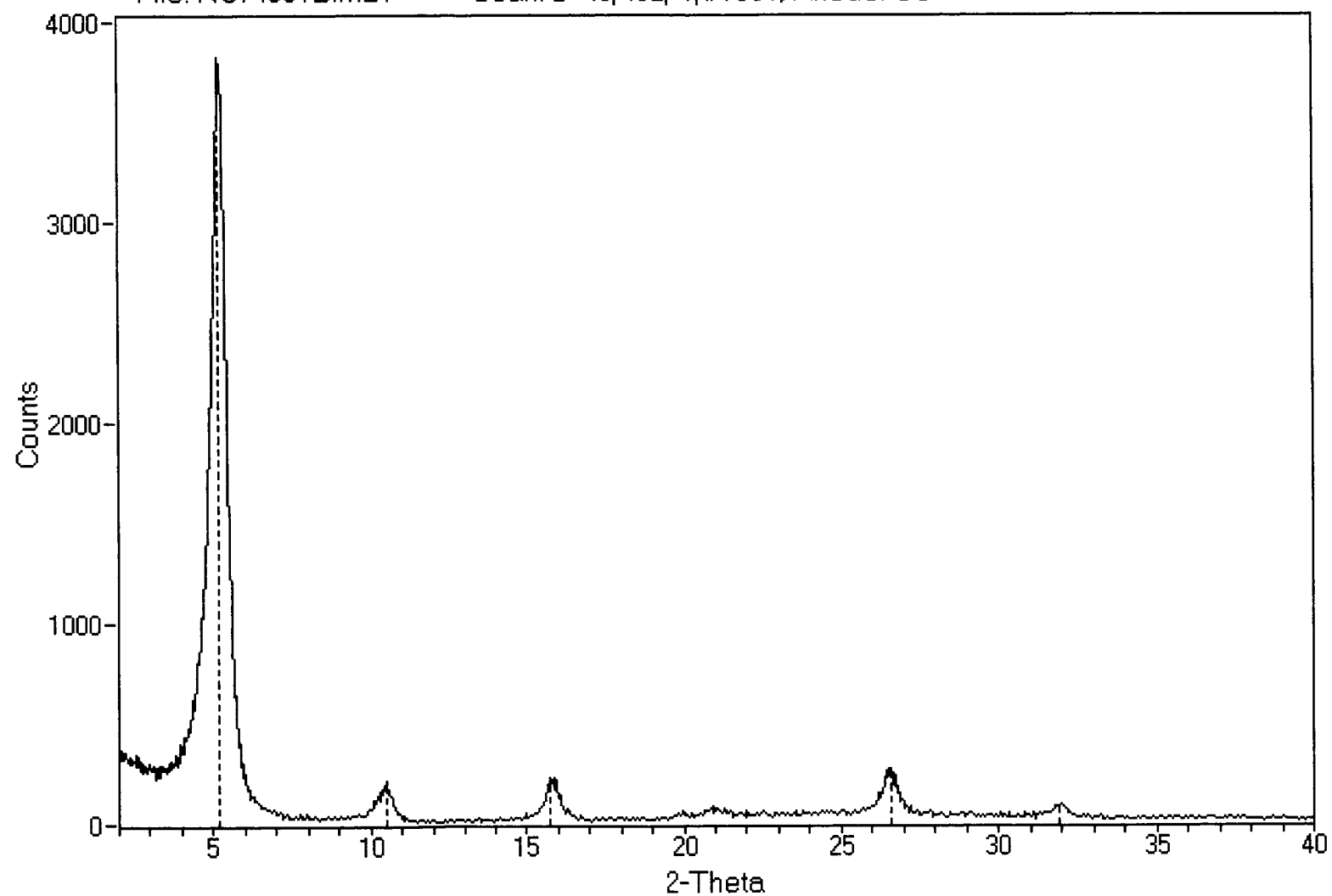
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.160	14.3366	6.161	14.3341	141	1706	100.0	2160	96.3	1.140
2:	6.200	14.2444	6.200	14.2450	139	1634	95.8	2242	100.0	1.235
3:	6.939	12.7280	6.939	12.7281	194	1504	88.2	966	43.1	0.578
4:	14.101	6.2756	14.101	6.2758	23	52	3.0	19	0.8	0.329
5:	28.861	3.0910	28.859	3.0912	48	136	8.0	116	5.2	0.768

* Intensity values are based on total raw counts.

ID: 4/6/94 - NOPI-331-GLY

File: NOPI331B.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI331B.MDI> 4/6/94 - NOPI-331-GLY

----- Scan Parameters: -----

Radiation = CU_1.540598

Scan Range = 2- 40

Step Size = .02

Count Time = 1 sec.

Filter length(pts) = 25

Noise level(sigmas) = 5.0

Intensity cutoff(%) = .5-100

2-Theta Zero (degs) = 0

----- Search Parameters: -----

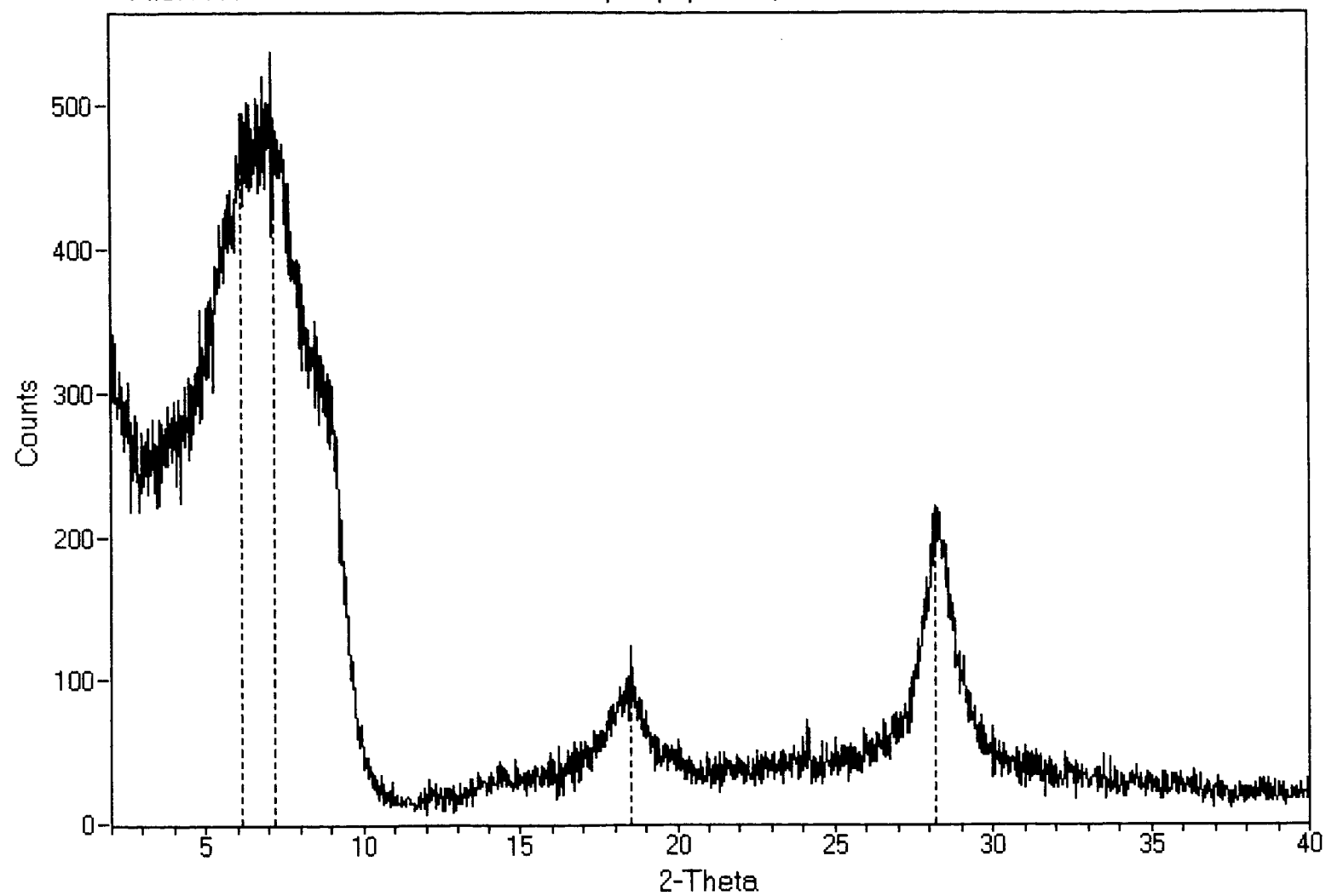
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.200	16.9808	5.196	16.9923	145	3688	100.0	2270	100.0	0.554
2:	10.499	8.4191	10.490	8.4261	20	201	5.5	76	3.3	0.340
3:	15.780	5.6114	15.788	5.6086	23	209	5.7	90	4.0	0.388
4:	26.580	3.3508	26.580	3.3509	46	231	6.3	68	3.0	0.265
5:	31.938	2.7999	31.945	2.7993	30	77	2.1	24	1.1	0.281

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-331-375C

File: NOPI331C.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI331C.MDI> 4/12/94 - NOPI-331-375C

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           Filter length(pts) = 25
Scan Range  = 2- 40                 Noise level(sigmas) = 5.0
Step Size   = .02                   Intensity cutoff(%) = .5-100
Count Time  = 1 sec.                2-Theta Zero (deg) = 0
-----
  
```

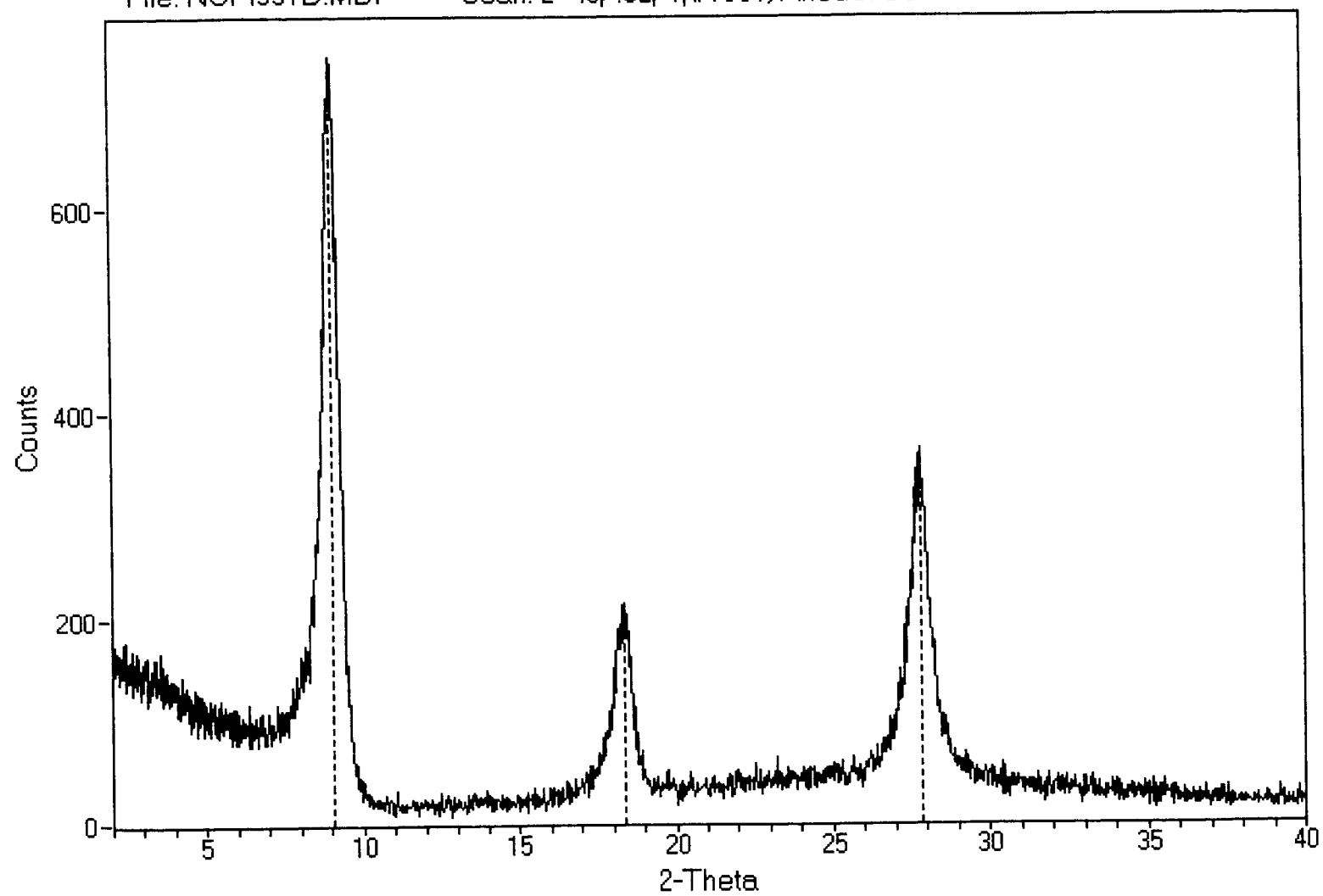
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.141	14.3810	6.135	14.3936	296	199	100.0	43	100.0	0.194
2:	7.180	12.3027	7.180	12.3025	297	195	98.0	18	41.9	0.083
3:	18.491	4.7945	18.491	4.7945	33	90	45.2	5	11.6	0.050
4:	28.180	3.1642	28.179	3.1643	48	173	86.9	19	44.2	0.099

* Intensity values are based on total raw counts.

ID: 4/12/94 - NOPI-331-550C

File: NOPI331D.MDI

Scan: 2- 40/ .02/ 1/#1901, Anode: CU



File: NOPI331D.MDI> 4/12/94 - NOPI-331-550C

----- Scan Parameters: ----- Search Parameters: -----
Radiation = CU_1.540598 Filter length(pts) = 25
Scan Range = 2- 40 Noise level(sigmas) = 5.0
Step Size = .02 Intensity cutoff(%) = .5-100
Count Time = 1 sec. 2-Theta Zero (deg) = 0

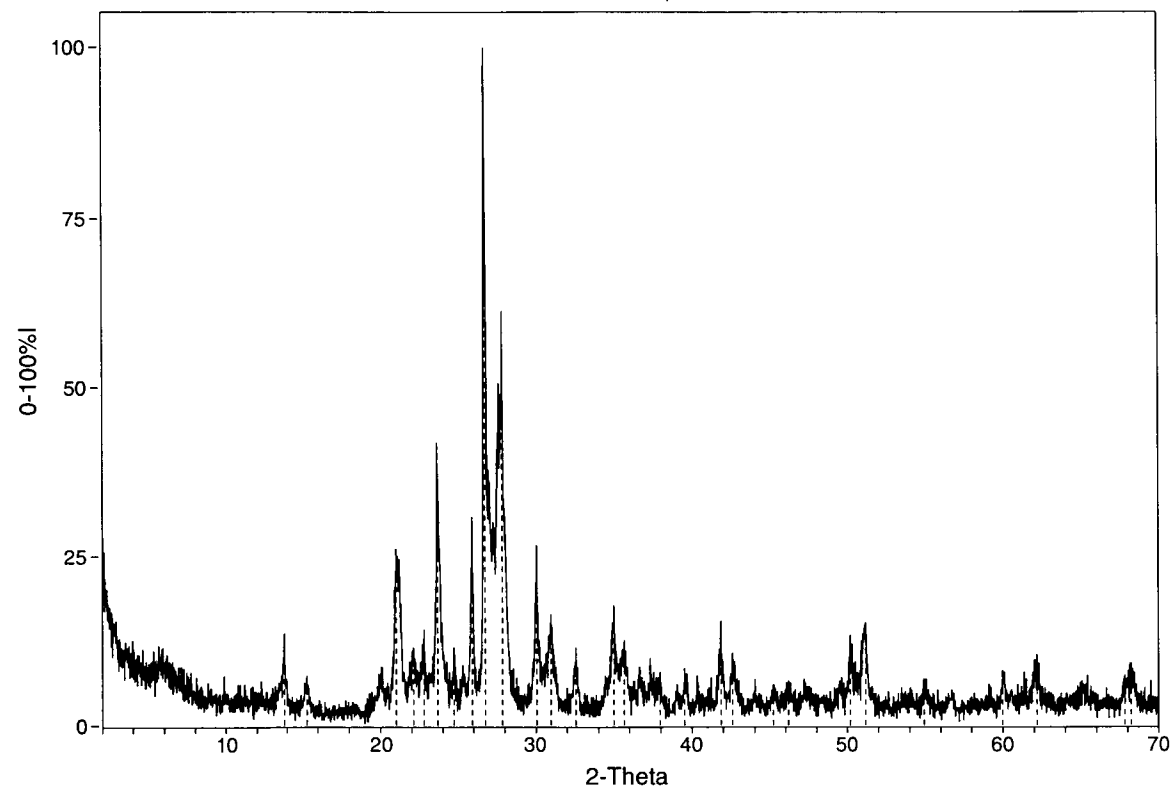
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	9.060	9.7529	9.051	9.7627	56	692	100.0	395	100.0	0.514
2:	18.381	4.8228	18.378	4.8237	26	188	27.2	81	20.5	0.388
3:	27.819	3.2044	27.812	3.2051	44	320	46.2	222	56.2	0.624

* Intensity values are based on total raw counts.

ID: 3/23/94 - NOPI-333-XRD1

File: NOPI3331.MDI Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI3331.MDI> 3/23/94 - NOPI-333-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
 Scan Range = 2 - 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
 Noise level(sigmas) = 3.0
 Intensity cutoff(%) = 2.0-100
 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	13.819	6.4030	13.800	6.4118	9	43	11.7	454	7.4	0.190
2:	15.299	5.7868	15.293	5.7892	6	22	6.0	266	4.3	0.218
3:	21.001	4.2267	21.049	4.2173	15	85	23.0	1637	26.6	0.347
4:	22.120	4.0155	22.114	4.0164	18	26	7.0	225	3.7	0.156
5:	22.798	3.8975	22.792	3.8986	18	36	9.8	170	2.8	0.085
6:	23.662	3.7571	23.696	3.7518	18	142	38.5	1837	29.8	0.233
7:	24.720	3.5986	24.721	3.5984	16	28	7.6	135	2.2	0.087
8:	25.919	3.4348	25.906	3.4365	18	100	27.1	859	14.0	0.155
9:	26.760	3.3288	26.788	3.3253	15	369	100.0	4616	75.0	0.225
10:	27.859	3.1998	27.827	3.2034	14	221	59.9	6155	100.0	0.501
11:	30.039	2.9724	30.037	2.9726	10	92	24.9	1255	20.4	0.246
12:	30.959	2.8861	30.949	2.8871	9	54	14.6	1228	20.0	0.409
13:	32.559	2.7479	32.548	2.7488	8	36	9.8	422	6.9	0.211
14:	34.998	2.5617	34.989	2.5624	10	58	15.7	1590	25.8	0.493
15:	35.659	2.5158	35.640	2.5171	13	35	9.5	507	8.2	0.261
16:	37.938	2.3697	37.932	2.3701	10	20	5.4	129	2.1	0.116
17:	39.522	2.2783	39.535	2.2776	7	25	6.8	197	3.2	0.142
18:	41.839	2.1574	41.828	2.1579	7	52	14.1	674	11.0	0.233
19:	42.581	2.1215	42.598	2.1206	8	33	8.9	470	7.6	0.256
20:	45.201	2.0044	45.205	2.0042	7	16	4.3	154	2.5	0.173
21:	46.200	1.9634	46.203	1.9632	8	17	4.6	164	2.7	0.174
22:	50.201	1.8158	50.216	1.8154	9	42	11.4	581	9.4	0.249
23:	51.178	1.7835	51.135	1.7849	10	48	13.0	779	12.7	0.292
24:	54.941	1.6699	54.949	1.6697	6	20	5.4	212	3.4	0.191
25:	59.983	1.5410	59.994	1.5407	10	21	5.7	144	2.3	0.123
26:	62.180	1.4917	62.155	1.4923	10	30	8.1	429	7.0	0.257
27:	67.820	1.3807	67.829	1.3806	9	19	5.1	218	3.5	0.207
28:	68.220	1.3736	68.222	1.3736	9	26	7.0	524	8.5	0.363

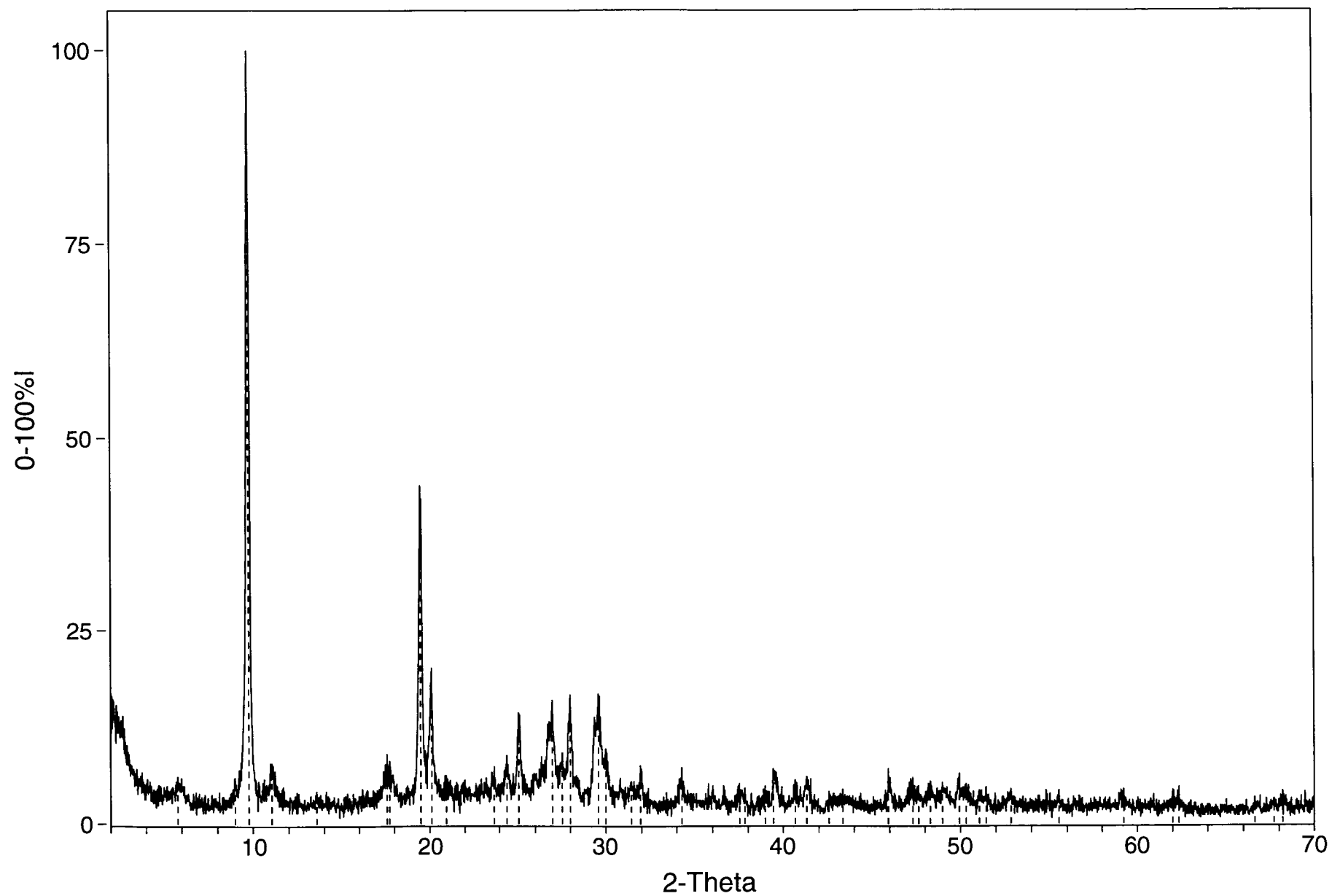
* Intensity values are based on total raw counts.

ID: 3/16/94 - NOPI-333-XRD2

File: NOPI3332.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

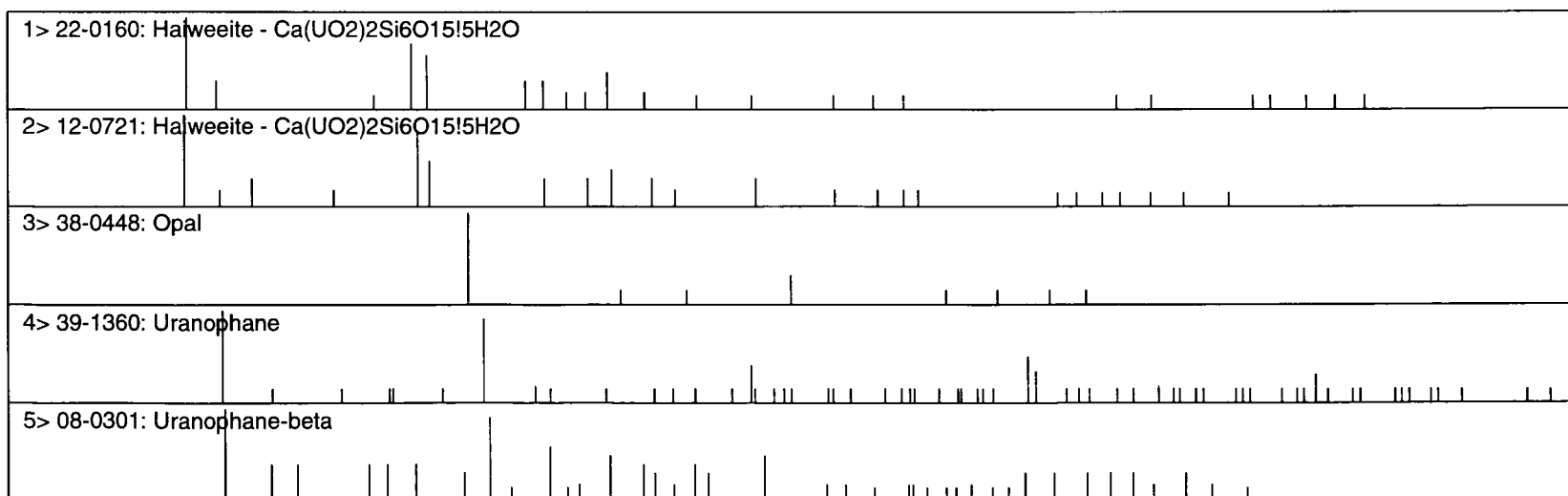
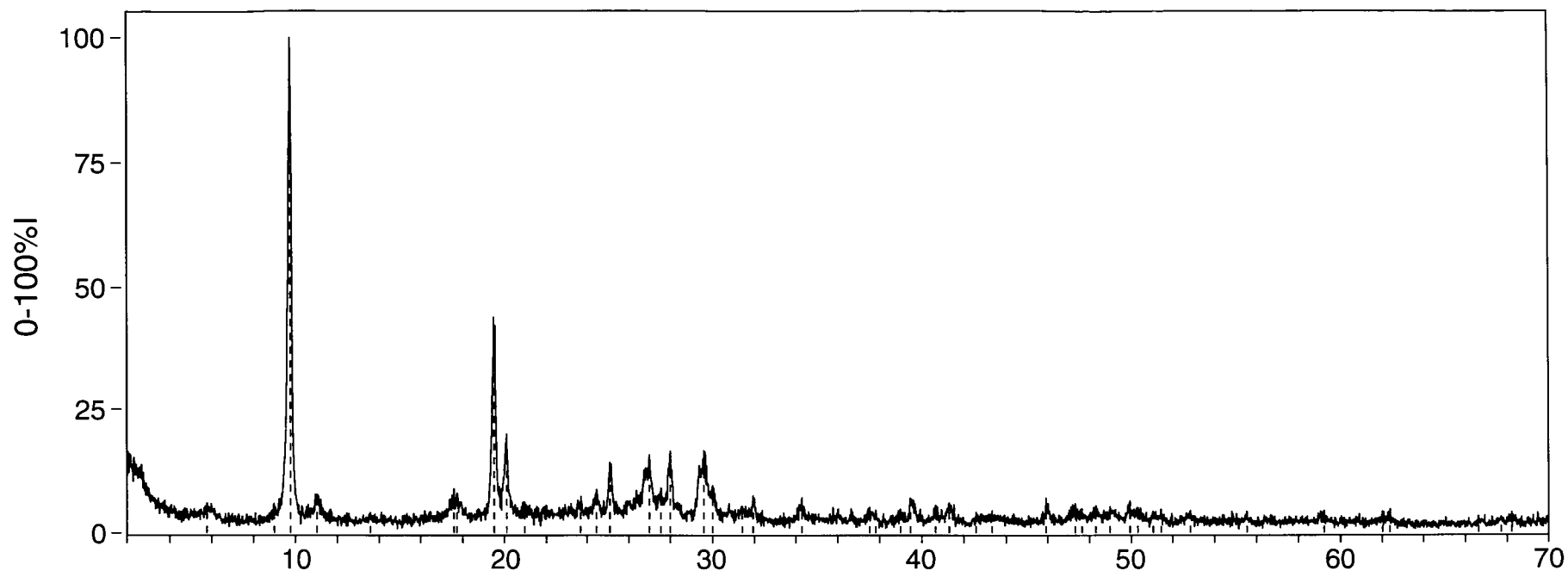


ID: 3/16/94 - NOPI-333-XRD2

File: NOPI3332.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



2-Theta

File: NOPI3332.MDI> 3/16/94 - NOPI-333-XRD2

----- Scan Parameters: -----
 Radiation = CU_1.540598
 Scan Range = 2 - 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----
 Filter length(pts) = 25
 Noise level(sigmas) = 1.0
 Intensity cutoff(%) = 1.0-100
 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.781	15.2767	5.811	15.1960	19	23	3.4	549	6.2	0.430
2:	8.980	9.8397	9.040	9.7748	18	23	3.4	323	3.6	0.253
3:	9.759	9.0558	9.738	9.0753	17	675	100.0	8922	100.0	0.238
4:	11.040	8.0076	11.065	7.9901	22	32	4.7	484	5.4	0.272
5:	13.578	6.5160	13.590	6.5104	13	16	2.4	208	2.3	0.234
6:	17.582	5.0403	17.599	5.0354	19	43	6.4	981	11.0	0.411
7:	17.719	5.0016	17.701	5.0067	20	36	5.3	859	9.6	0.429
8:	19.480	4.5532	19.480	4.5531	22	281	41.6	3440	38.6	0.220
9:	20.118	4.4102	20.088	4.4167	22	117	17.3	1834	20.6	0.282
10:	20.959	4.2352	20.964	4.2340	24	19	2.8	135	1.5	0.128
11:	23.716	3.7487	23.702	3.7508	24	27	4.0	213	2.4	0.142
12:	24.439	3.6393	24.423	3.6417	25	36	5.3	452	5.1	0.226
13:	25.081	3.5476	25.100	3.5450	26	73	10.8	792	8.9	0.195
14:	26.979	3.3022	26.939	3.3071	24	86	12.7	3148	35.3	0.659
15:	27.540	3.2362	27.553	3.2347	23	40	5.9	2142	24.0	0.964
16:	27.998	3.1843	27.977	3.1866	25	90	13.3	1511	16.9	0.302
17:	29.580	3.0175	29.562	3.0193	22	94	13.9	2302	25.8	0.441
18:	29.999	2.9763	29.933	2.9828	22	45	6.7	972	10.9	0.389
19:	31.420	2.8448	31.434	2.8437	21	17	2.5	182	2.0	0.193
20:	31.941	2.7996	31.942	2.7996	18	34	5.0	370	4.1	0.196
21:	34.279	2.6139	34.264	2.6150	15	35	5.2	477	5.3	0.245
22:	37.521	2.3951	37.549	2.3934	13	23	3.4	294	3.3	0.230
23:	37.818	2.3770	37.796	2.3783	13	19	2.8	145	1.6	0.137
24:	38.980	2.3087	38.983	2.3086	13	21	3.1	201	2.3	0.172
25:	39.444	2.2827	39.504	2.2793	13	36	5.3	724	8.1	0.362
26:	40.661	2.2171	40.678	2.2162	14	25	3.7	268	3.0	0.193
27:	41.300	2.1842	41.306	2.1839	12	30	4.4	905	10.1	0.543
28:	42.581	2.1215	42.612	2.1200	11	18	2.7	187	2.1	0.187
29:	43.339	2.0861	43.337	2.0862	11	20	3.0	791	8.9	0.712
30:	45.922	1.9746	45.951	1.9734	13	36	5.3	377	4.2	0.188
31:	47.319	1.9195	47.289	1.9207	17	24	3.6	408	4.6	0.306
32:	47.641	1.9073	47.600	1.9088	15	19	2.8	803	9.0	0.761
33:	48.300	1.8828	48.300	1.8828	16	22	3.3	363	4.1	0.297
34:	48.982	1.8582	49.001	1.8575	17	20	3.0	306	3.4	0.275
35:	49.939	1.8248	49.947	1.8245	17	28	4.1	291	3.3	0.187
36:	50.321	1.8118	50.301	1.8125	16	20	3.0	447	5.0	0.402
37:	51.061	1.7873	51.076	1.7868	14	16	2.4	112	1.3	0.126
38:	51.440	1.7750	51.417	1.7757	13	20	3.0	208	2.3	0.187
39:	52.839	1.7312	52.825	1.7317	13	18	2.7	259	2.9	0.259
40:	55.540	1.6533	55.541	1.6532	13	17	2.5	130	1.5	0.138
41:	59.219	1.5590	59.184	1.5599	12	19	2.8	277	3.1	0.262
42:	62.020	1.4952	62.035	1.4949	10	20	3.0	421	4.7	0.379
43:	62.378	1.4875	62.352	1.4880	9	24	3.6	289	3.2	0.217

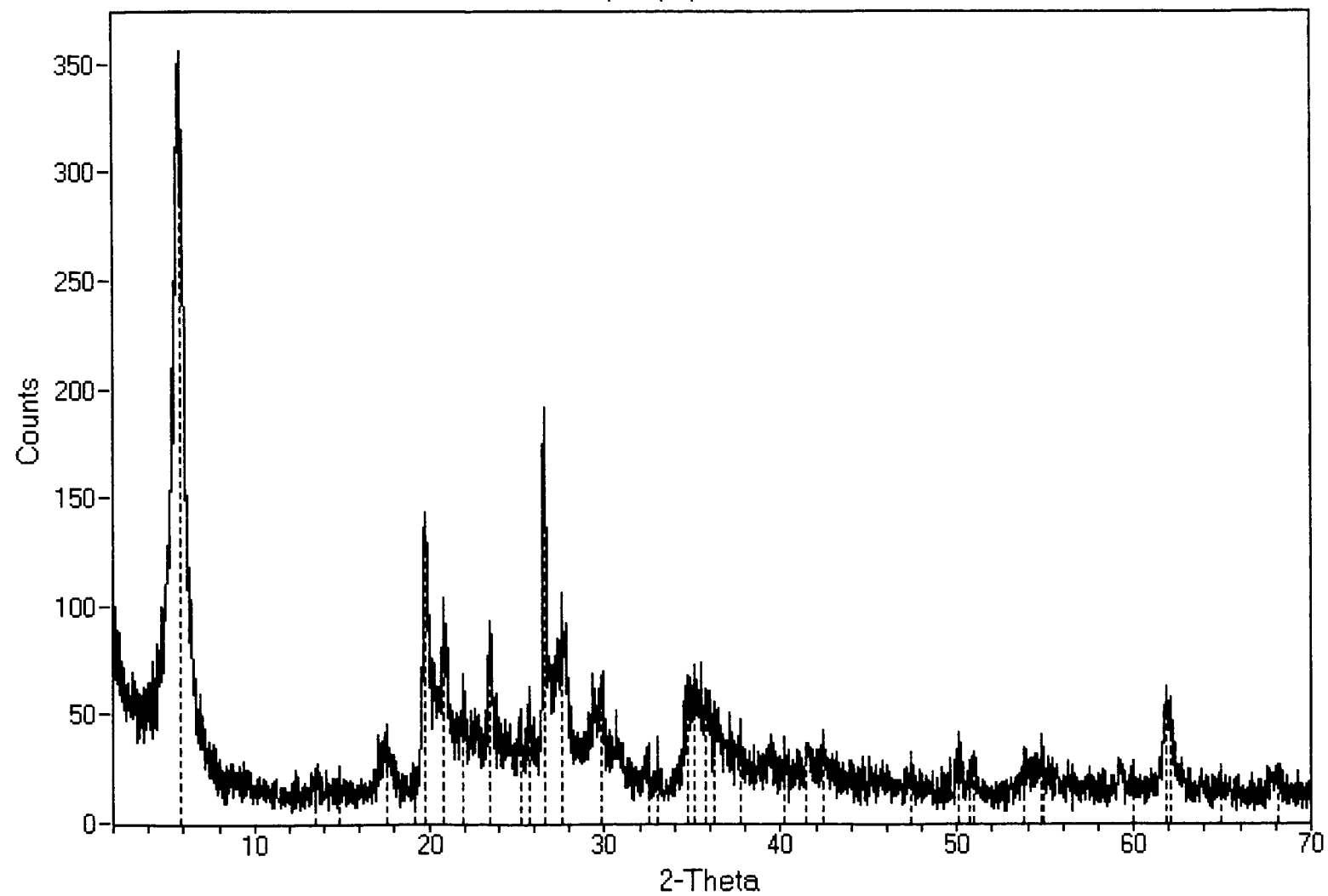
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
44:	66.643	1.4022	66.666	1.4018	9	14	2.1	104	1.2	0.134
45:	67.720	1.3825	67.718	1.3826	10	12	1.8	205	2.3	0.307
46:	68.220	1.3736	68.229	1.3735	10	19	2.8	202	2.3	0.191

* Intensity values are based on total raw counts.

ID: 4/13/94 - NOPI-369-XRD1

File: NOPI3691.MDI

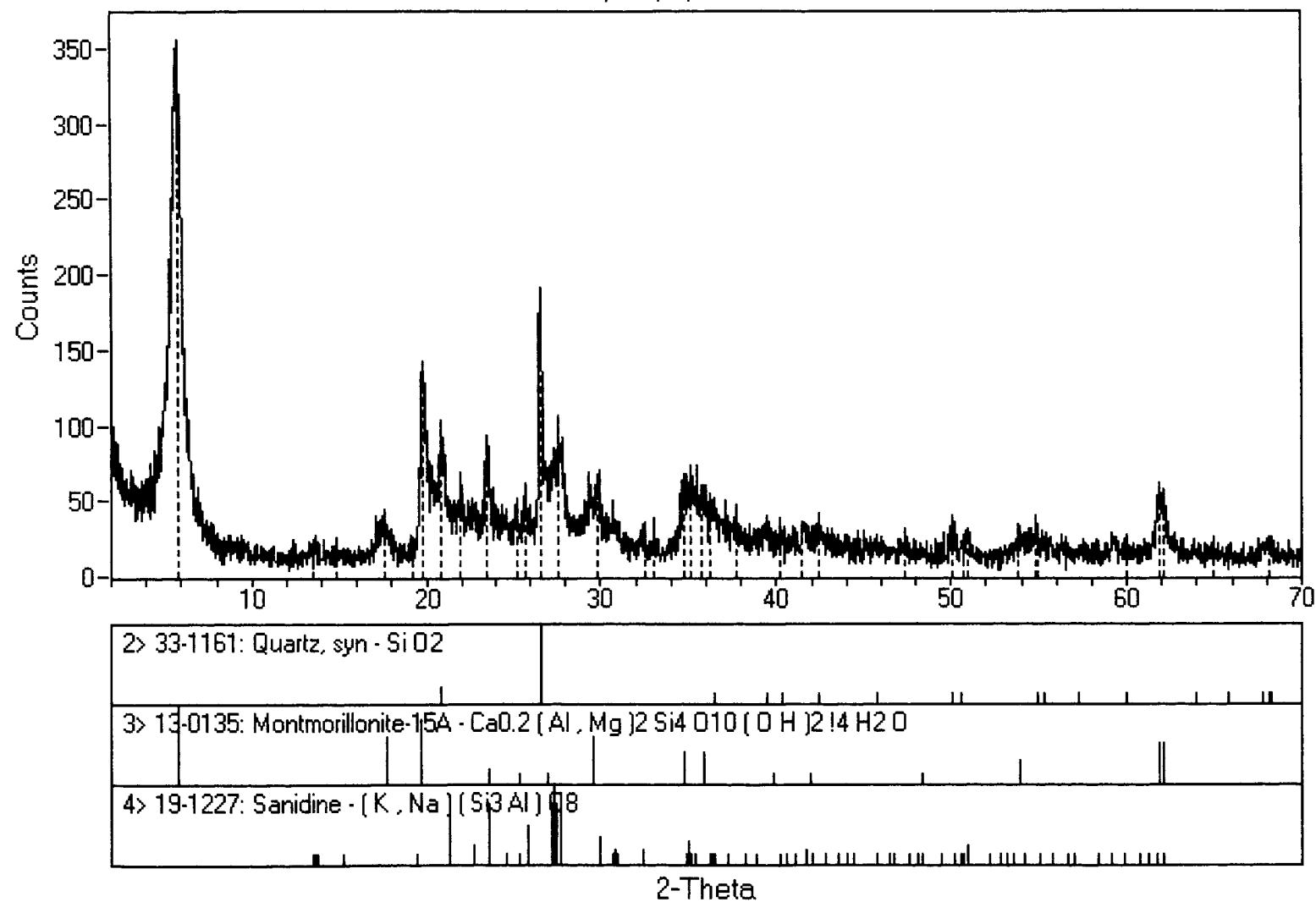
Scan: 2- 70/ .02/ 1/#3401, Anode: CU



ID: 4/13/94 - NOPI-369-XRD1

File: NOPI3691.MDI

Scan: 2- 70/.02/ 1/#3401, Anode: CU



Jade: Peak Listing

Tue Apr 19 1994 @12:19pm

File: NOPI3691.MDI> 4/13/94 - NOPI-369-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
 Scan Range = 2- 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
 Noise level(sigmas) = 5.0
 Intensity cutoff(%) = .5-100
 2-Theta Zero (deg) = 0

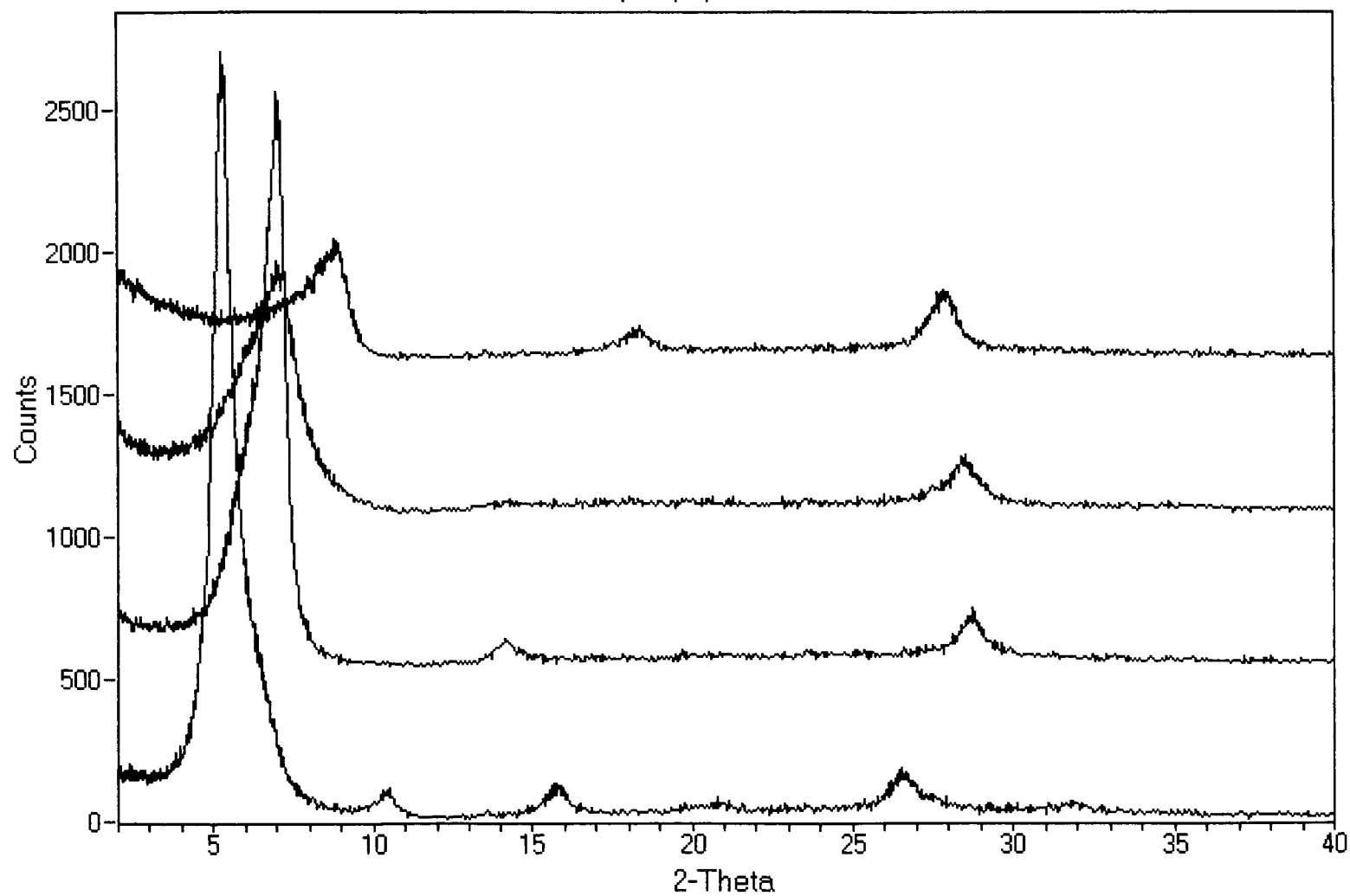
Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.859	15.0722	5.854	15.0851	37	319	100.0	32	78.0	0.090
2:	13.516	6.5457	13.516	6.5457	8	19	6.0	1	2.4	0.047
3:	14.878	5.9494	14.878	5.9494	8	18	5.6	1	2.4	0.050
4:	17.520	5.0579	17.521	5.0575	11	34	10.7	5	12.2	0.132
5:	19.125	4.6369	19.125	4.6369	9	18	5.6	1	2.4	0.050
6:	19.819	4.4760	19.812	4.4777	25	118	37.0	41	100.0	0.313
7:	20.819	4.2633	20.830	4.2610	21	83	26.0	21	51.2	0.228
8:	21.887	4.0576	21.887	4.0576	38	31	9.7	1	2.4	0.029
9:	23.540	3.7763	23.541	3.7762	30	63	19.7	8	19.5	0.114
10:	25.216	3.5289	25.216	3.5289	24	28	8.8	1	2.4	0.032
11:	25.741	3.4582	25.736	3.4588	26	36	11.3	4	9.8	0.100
12:	26.581	3.3508	26.586	3.3501	28	164	51.4	35	85.4	0.192
13:	27.621	3.2269	27.622	3.2268	32	74	23.2	25	61.0	0.304
14:	29.877	2.9882	29.874	2.9885	25	45	14.1	4	9.8	0.080
15:	32.479	2.7545	32.479	2.7545	13	23	7.2	1	2.4	0.039
16:	32.986	2.7133	32.986	2.7133	12	27	8.5	1	2.4	0.033
17:	34.720	2.5817	34.720	2.5817	23	45	14.1	2	4.9	0.040
18:	35.098	2.5547	35.098	2.5547	26	47	14.7	2	4.9	0.038
19:	35.761	2.5088	35.761	2.5089	22	39	12.2	4	9.8	0.092
20:	36.199	2.4795	36.199	2.4795	23	32	10.0	1	2.4	0.028
21:	37.718	2.3830	37.718	2.3830	23	24	7.5	1	2.4	0.037
22:	40.162	2.2435	40.162	2.2435	16	23	7.2	1	2.4	0.039
23:	41.499	2.1742	41.499	2.1742	16	20	6.3	1	2.4	0.045
24:	42.381	2.1310	42.381	2.1310	15	27	8.5	1	2.4	0.033
25:	47.341	1.9187	47.341	1.9187	12	20	6.3	1	2.4	0.045
26:	50.077	1.8201	50.077	1.8201	11	30	9.4	1	2.4	0.030
27:	50.741	1.7978	50.741	1.7978	11	17	5.3	1	2.4	0.053
28:	50.903	1.7924	50.903	1.7924	11	21	6.6	2	4.9	0.086
29:	53.864	1.7007	53.864	1.7007	12	22	6.9	1	2.4	0.041
30:	54.743	1.6754	54.743	1.6754	12	28	8.8	1	2.4	0.032
31:	54.942	1.6699	54.942	1.6699	13	21	6.6	1	2.4	0.043
32:	59.958	1.5416	59.958	1.5416	10	18	5.6	1	2.4	0.050
33:	61.841	1.4991	61.854	1.4988	12	50	15.7	16	39.0	0.288
34:	62.081	1.4939	62.064	1.4942	12	45	14.1	11	26.8	0.220
35:	64.903	1.4356	64.903	1.4356	10	16	5.0	1	2.4	0.056
36:	68.140	1.3750	68.140	1.3750	10	16	5.0	1	2.4	0.056

* Intensity values are based on total raw counts.

ID: 3/23/94 - NOPI-369-GLY

File: NOPI369B.MDI

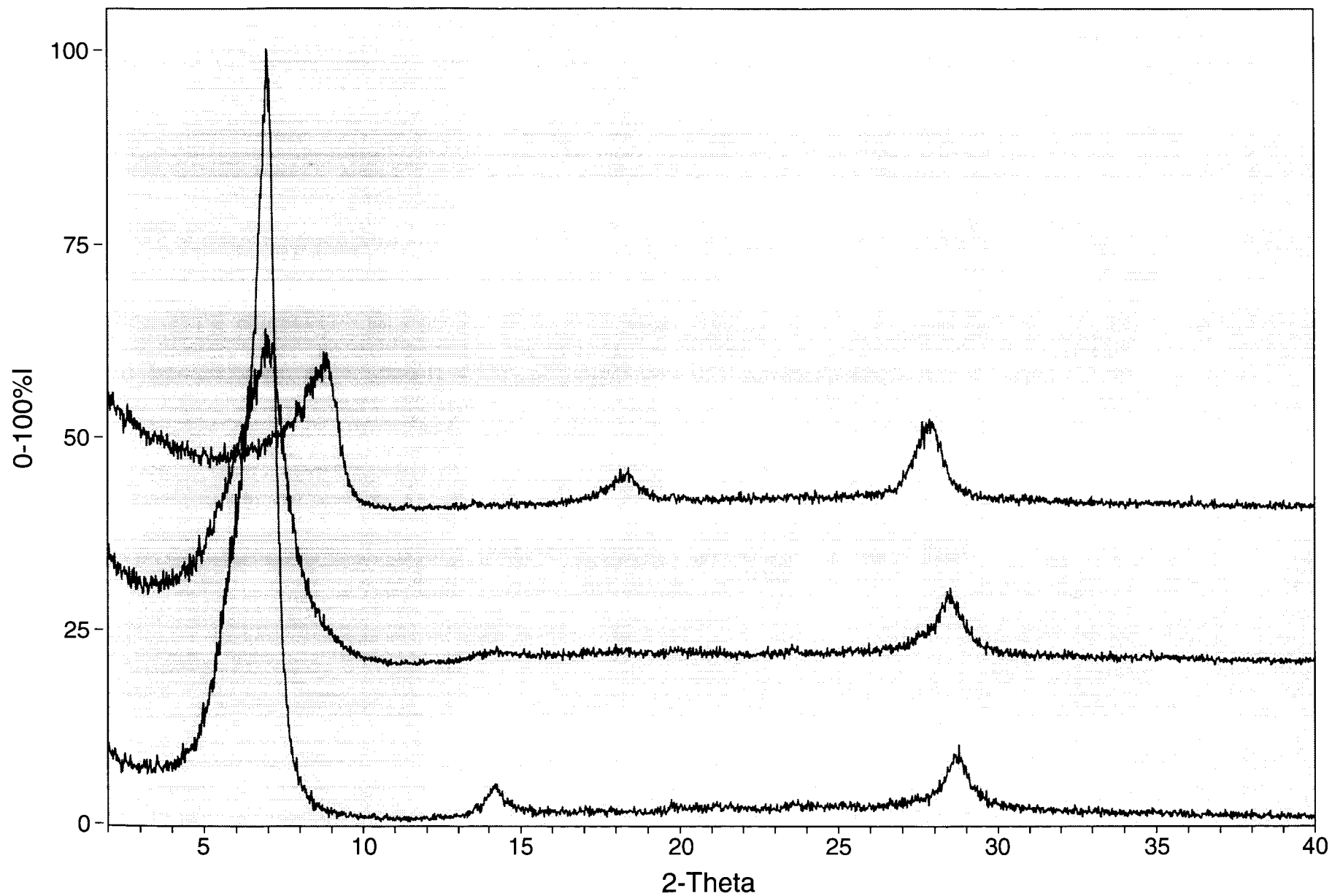
Scan: 2- 40/ .02/ 1/#1901, Anode: CU



369
ID: 3/18/94 - NOPI-371-AD
File: NOPI369A.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

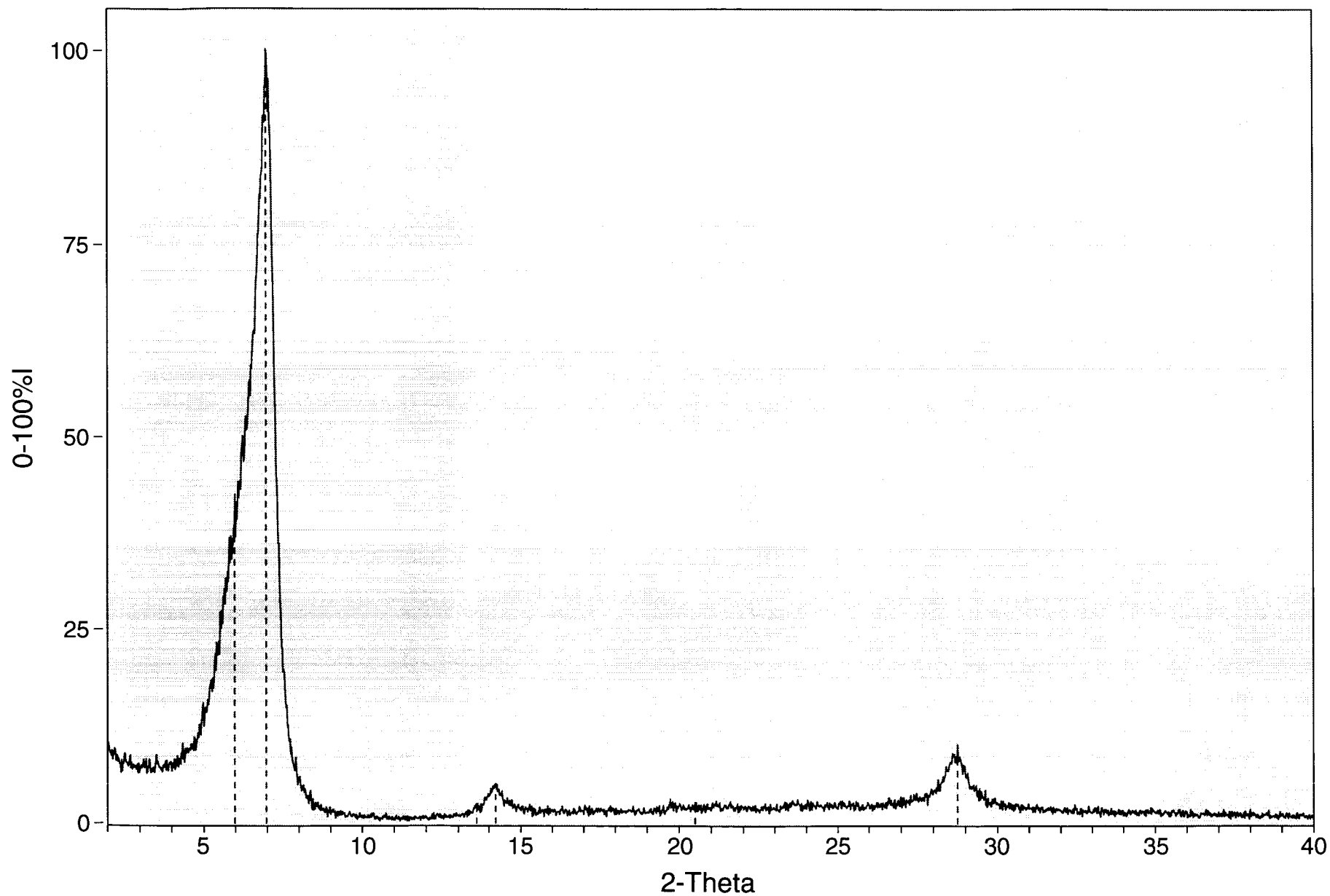
Zero=0.0



369
ID: 3/18/94 - NOPI-371-AD
File: NOPI369A.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Fri Mar 18 1994 @2:37pm

=====

File: NOPI369A.MDI> 3/18/94 - NOPI-371-AD

----- Scan Parameters: ----- Search Parameters: -----

Radiation	=	CU_1.540598	Filter length(pts)	=	25
Scan Range	=	2 - 40	Noise level(sigmas)	=	1.0
Step Size	=	.02	Intensity cutoff(%)	=	1.0-100
Count Time	=	1 sec.	2-Theta Zero (deg)	=	0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.981	14.7658	6.008	14.6988	134	647	34.5	54723	60.7	1.522
2:	6.980	12.6534	6.974	12.6641	151	1874	100.0	90132	100.0	0.866
3:	13.600	6.5055	13.658	6.4783	19	33	1.8	2443	2.7	1.333
4:	14.220	6.2236	14.208	6.2287	22	82	4.4	3187	3.5	0.700
5:	20.501	4.3286	20.489	4.3312	31	24	1.3	1117	1.2	0.838
6:	28.759	3.1017	28.748	3.1029	45	162	8.6	7040	7.8	0.782

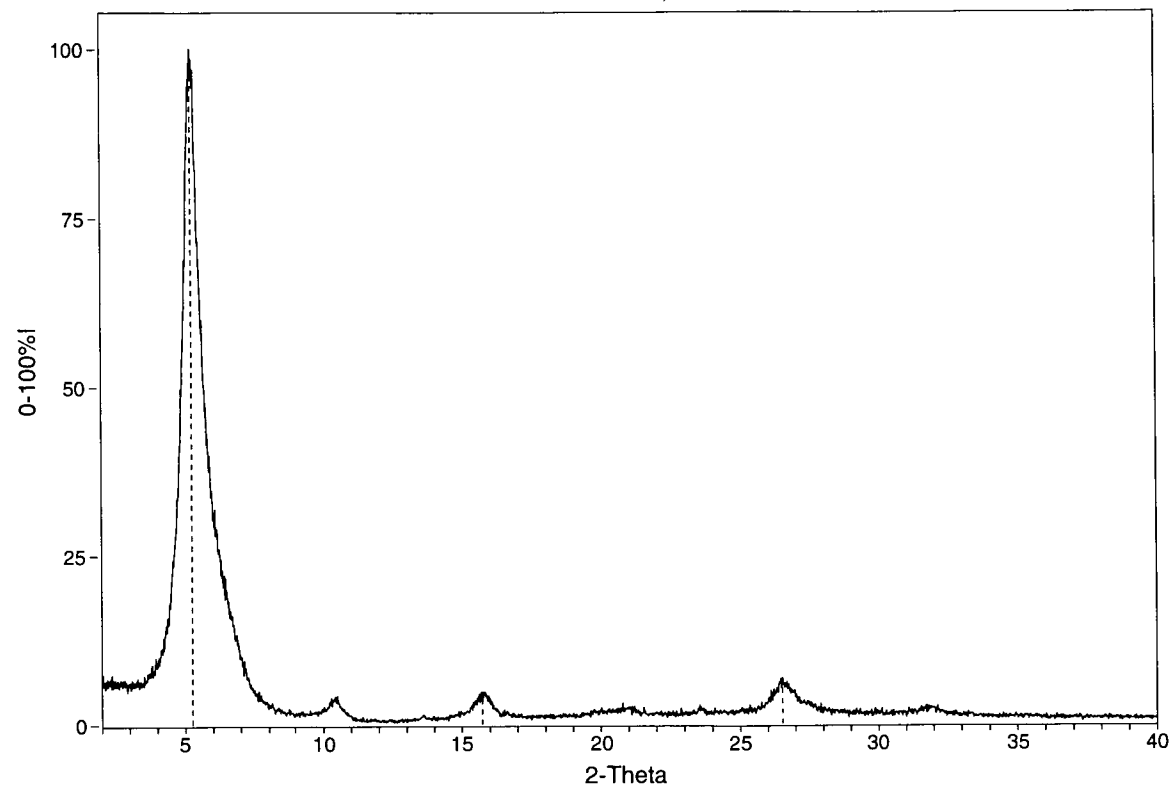
* Intensity values are based on total raw counts.

ID: 3/23/94 - NOPI-369-GLY

File: NOPI369B.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Thu Mar 24 1994 @7:47am

=====

File: NOPI369B.MDI> 3/23/94 - NOPI-369-GLY

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 40
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

Peak-Position Centroid-Position Peak & Area are without Bkgrd

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.260	16.7870	5.263	16.7770	171	2533	100.0	123792	100.0	0.880
2:	15.721	5.6326	15.730	5.6292	26	105	4.1	3555	2.9	0.609
3:	26.520	3.3584	26.525	3.3577	45	141	5.6	5902	4.8	0.753

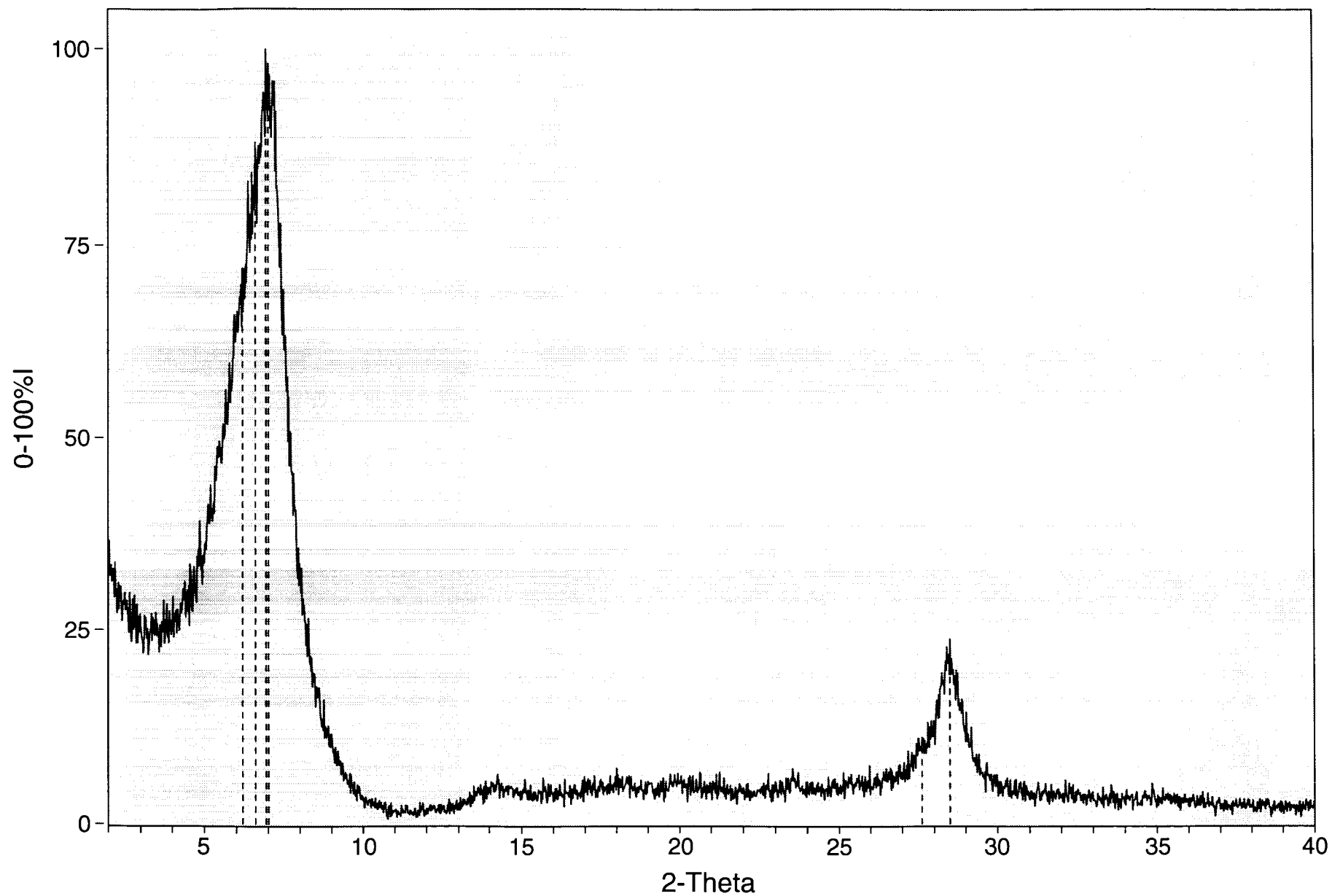
* Intensity values are based on total raw counts.

ID: 3/21/94 - NOPI-369-400 deg.C

File: NOPI369C.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Mon Mar 21 1994 @2:03pm

=====

File: NOPI369C.MDI> 3/21/94 - NOPI-369-400 deg.C

----- Scan Parameters: ----- Search Parameters: -----

Radiation = CU_1.540598	Filter length(pts) = 25
Scan Range = 2 - 40	Noise level(sigmas) = 3.0
Step Size = .02	Intensity cutoff(%) = 2.0-100
Count Time = 1 sec.	2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	6.200	14.2432	6.220	14.1986	229	411	59.7	50272	89.3	2.202
2:	6.601	13.3806	6.617	13.3468	203	581	84.4	56274	100.0	1.743
3:	6.940	12.7264	6.948	12.7117	202	688	100.0	53593	95.2	1.402
4:	7.020	12.5820	7.022	12.5791	201	673	97.8	52342	93.0	1.400
5:	27.620	3.2271	27.649	3.2237	49	50	7.3	1569	2.8	0.565
6:	28.499	3.1294	28.495	3.1299	43	169	24.6	7805	13.9	0.831

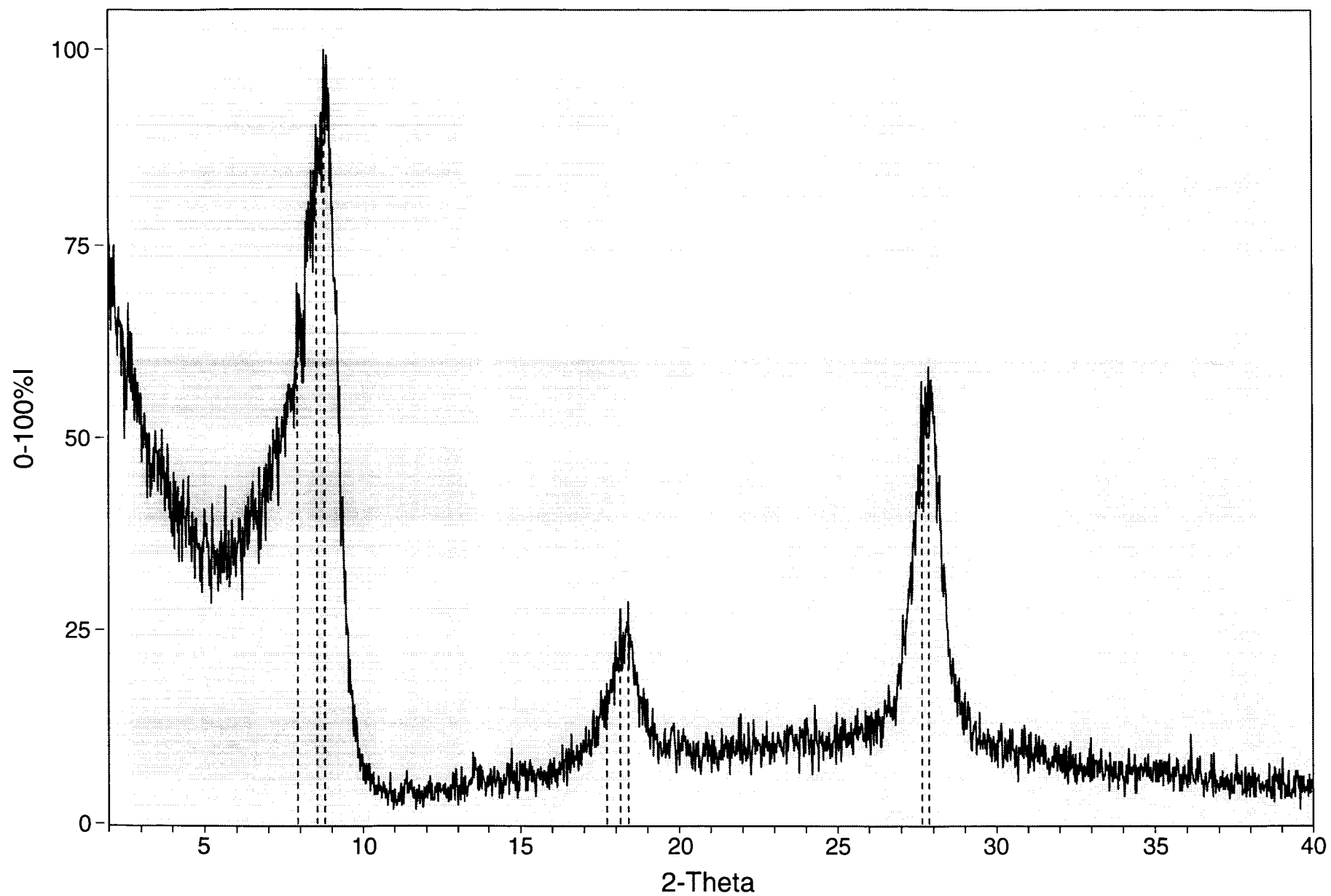
* Intensity values are based on total raw counts.

ID: 3/21/94 - NOPI-369-550 deg.C

File: NOPI369D.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Mon Mar 21 1994 @2:04pm

=====

File: NOPI369D.MDI> 3/21/94 - NOPI-369-550 deg.C

----- Scan Parameters: ----- Search Parameters: -----

Radiation = CU_1.540598	Filter length(pts) = 25
Scan Range = 2 - 40	Noise level(sigmas) = 3.0
Step Size = .02	Intensity cutoff(%) = 2.0-100
Count Time = 1 sec.	2-Theta Zero (deg) = 0

Peak-Position Centroid-Position Peak & Area are without Bkgrd

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.921	11.1525	7.944	11.1209	91	207	61.6	24831	100.0	2.159
2:	8.541	10.3448	8.559	10.3224	92	293	87.2	20191	81.3	1.240
3:	8.781	10.0626	8.784	10.0585	90	336	100.0	16759	67.5	0.898
4:	17.721	5.0010	17.756	4.9911	32	45	13.4	2084	8.4	0.834
5:	18.140	4.8864	18.161	4.8808	32	86	25.6	3881	15.6	0.812
6:	18.400	4.8180	18.384	4.8222	34	88	26.2	3113	12.5	0.637
7:	27.641	3.2247	27.671	3.2212	46	198	58.9	9332	37.6	0.848
8:	27.860	3.1997	27.861	3.1997	46	206	61.3	9939	40.0	0.868

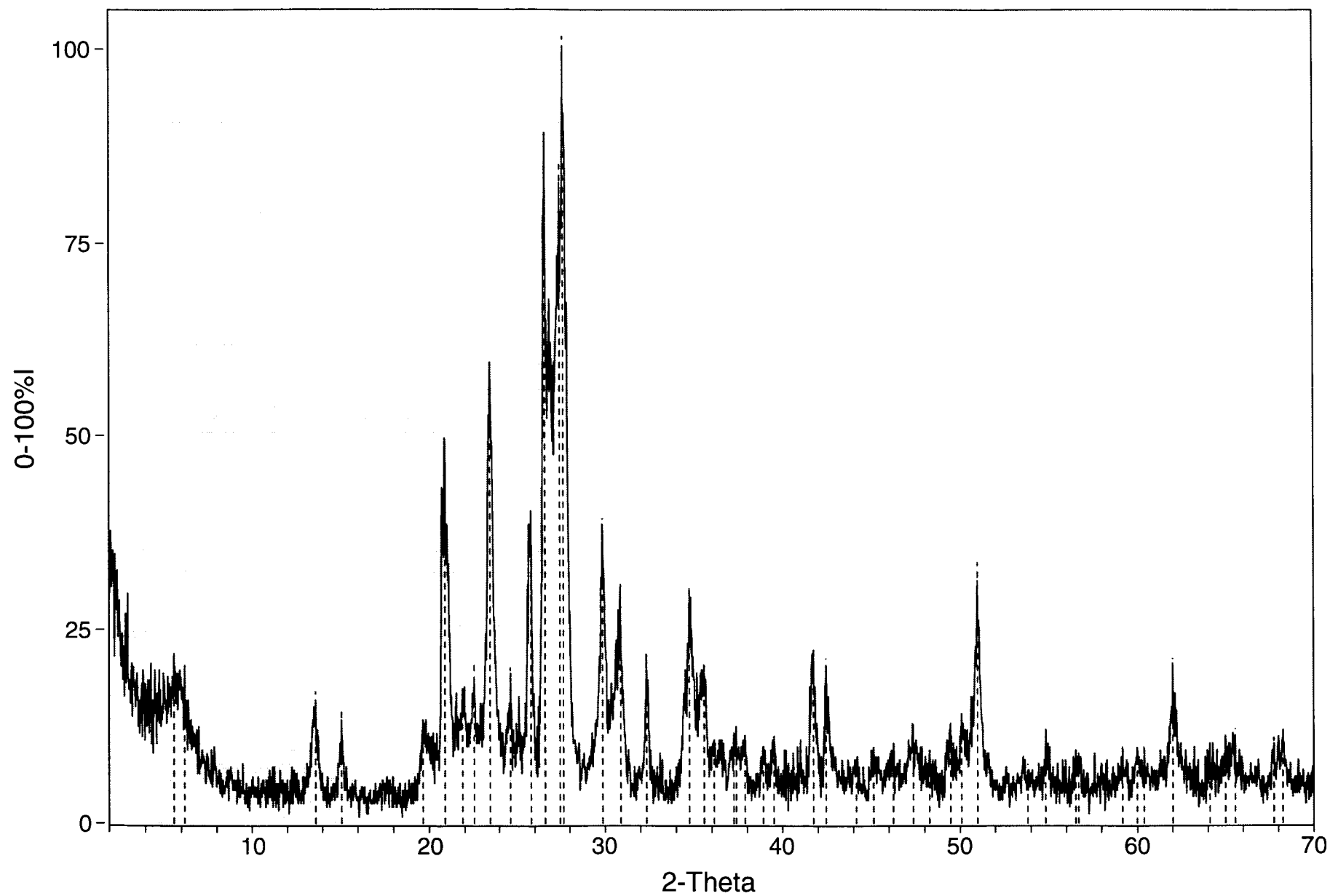
* Intensity values are based on total raw counts.

ID: 3/15/94 - NOPI-371-XRD1

File: NOPI3711.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0

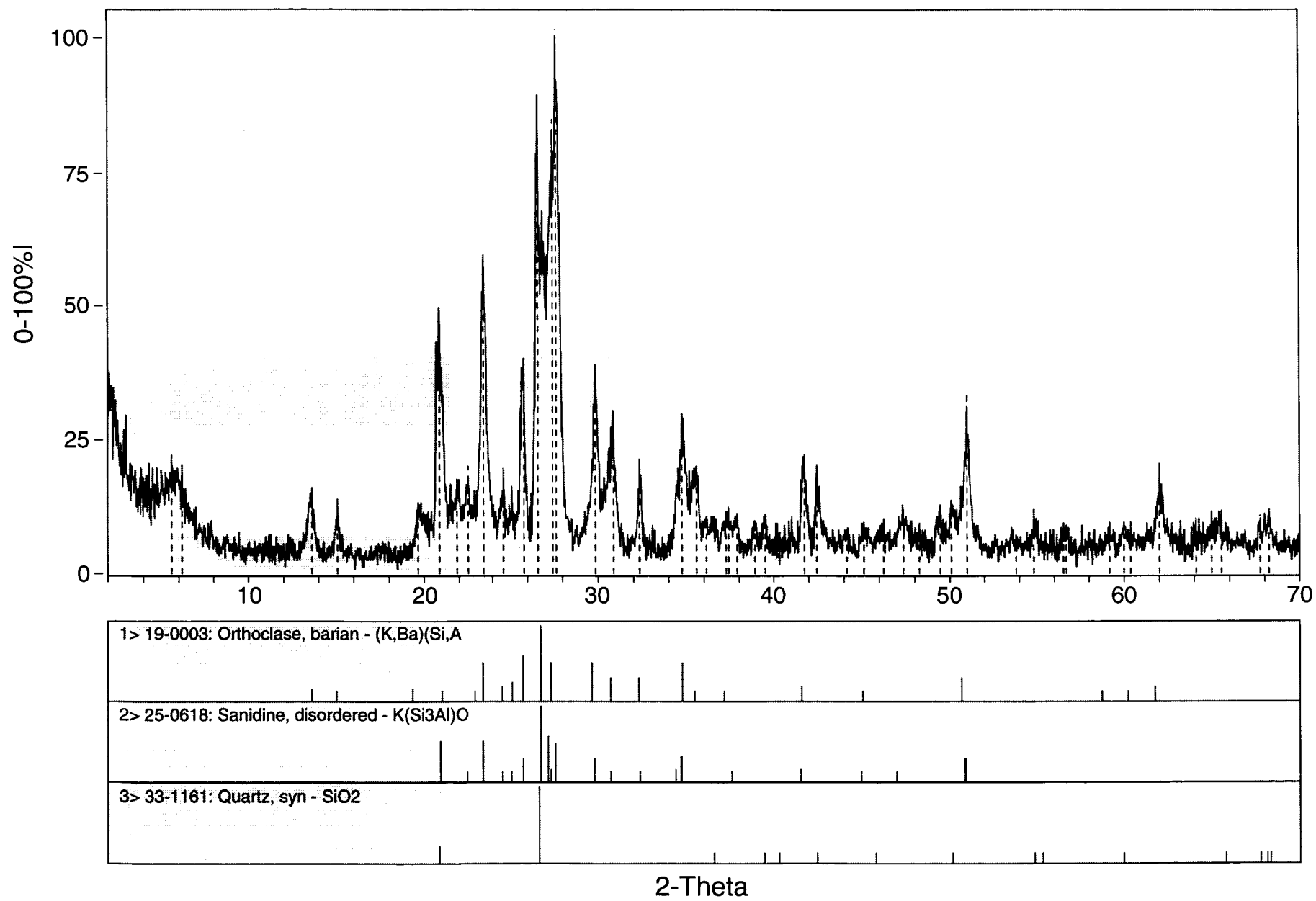


ID: 3/15/94 - NOPI-371-XRD1

File: NOPI3711.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI3711.MDI> 3/15/94 - NOPI-371-XRD1

----- Scan Parameters: -----

Radiation = CU_1.540598
 Scan Range = 2 - 70
 Step Size = .02
 Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
 Noise level(sigmas) = 1.0
 Intensity cutoff(%) = 1.0-100
 2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	5.585	15.8121	5.603	15.7599	24	30	13.5	1142	10.3	0.685
2:	6.184	14.2809	6.137	14.3912	21	29	13.1	971	8.8	0.603
3:	13.625	6.4939	13.591	6.5099	7	34	15.3	631	5.7	0.334
4:	15.069	5.8745	15.059	5.8785	6	29	13.1	367	3.3	0.228
5:	19.644	4.5156	19.691	4.5048	11	21	9.5	326	2.9	0.279
6:	20.885	4.2499	20.889	4.2491	16	101	45.5	1863	16.8	0.332
7:	21.870	4.0607	21.869	4.0610	21	22	9.9	297	2.7	0.243
8:	22.568	3.9367	22.553	3.9393	20	29	13.1	1424	12.8	0.884
9:	23.493	3.7837	23.503	3.7822	22	119	53.6	2147	19.4	0.325
10:	24.633	3.6111	24.612	3.6142	19	29	13.1	194	1.8	0.120
11:	25.796	3.4510	25.746	3.4575	19	77	34.7	996	9.0	0.233
12:	26.601	3.3483	26.638	3.3437	18	191	86.0	3782	34.1	0.356
13:	27.443	3.2474	27.468	3.2445	16	184	82.9	11083	100.0	1.084
14:	27.644	3.2242	27.631	3.2258	16	222	100.0	8626	77.8	0.699
15:	29.850	2.9908	29.856	2.9903	12	81	36.5	2095	18.9	0.466
16:	30.871	2.8942	30.834	2.8976	10	63	28.4	1544	13.9	0.441
17:	32.338	2.7662	32.347	2.7654	8	44	19.8	565	5.1	0.231
18:	34.744	2.5799	34.756	2.5791	11	61	27.5	1857	16.8	0.548
19:	35.565	2.5222	35.527	2.5248	10	39	17.6	2662	24.0	1.229
20:	36.125	2.4844	36.121	2.4847	12	14	6.3	813	7.3	1.045
21:	37.252	2.4118	37.273	2.4105	11	18	8.1	291	2.6	0.291
22:	37.388	2.4033	37.380	2.4038	11	18	8.1	421	3.8	0.421
23:	37.888	2.3727	37.856	2.3747	10	18	8.1	181	1.6	0.181
24:	38.914	2.3125	38.917	2.3123	10	14	6.3	157	1.4	0.202
25:	39.513	2.2788	39.492	2.2800	10	16	7.2	175	1.6	0.197
26:	41.741	2.1622	41.733	2.1626	10	43	19.4	731	6.6	0.306
27:	42.465	2.1270	42.499	2.1254	10	41	18.5	996	9.0	0.437
28:	44.168	2.0488	44.156	2.0494	8	14	6.3	174	1.6	0.224
29:	45.130	2.0074	45.129	2.0074	9	17	7.7	225	2.0	0.238
30:	46.252	1.9613	46.216	1.9627	11	14	6.3	170	1.5	0.219
31:	47.357	1.9181	47.352	1.9183	11	20	9.0	408	3.7	0.367
32:	48.278	1.8836	48.262	1.8842	9	13	5.9	243	2.2	0.336
33:	49.461	1.8413	49.440	1.8420	14	16	7.2	124	1.1	0.139
34:	50.086	1.8198	50.119	1.8186	9	25	11.3	1807	16.3	1.301
35:	50.987	1.7897	50.984	1.7898	8	72	32.4	1806	16.3	0.451
36:	53.813	1.7022	53.780	1.7032	8	11	5.0	212	1.9	0.347
37:	54.838	1.6728	54.860	1.6721	8	22	9.9	320	2.9	0.262
38:	56.542	1.6263	56.580	1.6253	7	15	6.8	220	2.0	0.264
39:	56.702	1.6221	56.671	1.6229	7	15	6.8	223	2.0	0.268
40:	59.167	1.5603	59.167	1.5603	8	18	8.1	227	2.0	0.227
41:	59.991	1.5408	60.006	1.5404	9	17	7.7	210	1.9	0.222
42:	60.372	1.5320	60.347	1.5326	10	16	7.2	196	1.8	0.220
43:	62.016	1.4953	62.027	1.4950	10	41	18.5	905	8.2	0.397

#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
44:	64.098	1.4516	64.117	1.4512	9	16	7.2	155	1.4	0.174
45:	64.985	1.4339	65.003	1.4336	10	19	8.6	655	5.9	0.621
46:	65.542	1.4231	65.510	1.4237	9	21	9.5	471	4.2	0.404
47:	67.750	1.3820	67.785	1.3814	10	17	7.7	181	1.6	0.192
48:	68.253	1.3730	68.219	1.3736	10	18	8.1	310	2.8	0.310

* Intensity values are based on total raw counts.

NOPI3711.MDI> 3/15/94 - NOPI-371-XRD1

40 Hits Sorted on Figure-Of-Merit				QM*	PDF-#	FOM	OFF	I%	RIR	Space-Group	a	b	c	Vol*	Z	Dx*
1>	() Orthoclase, barian - (K,Ba,Na)(S	+	19-	2	0.8	0.00	74			I2/m (12)	8.46	13.04	7.20	362	4	2.880
2>	() Lazulite - MgAl2(PO4)2(OH)2	+	34-	136	0.9	0.00	74			P21/n (14)	7.15	7.28	7.14	324	2	3.095
3>	() Orthoclase - KAlSi3O8	+	31-	966	0.9	0.00	61			I2/m (12)	8.43	12.98	7.20	360	4	2.571
4>	() Orthoclase, barian - (K,Ba)(Si,A		19-	3	0.9	0.06	60			I2/m (12)	8.50	13.06	7.20	365	4	
5>	() Sanidine, disordered - K(Si3Al)O	+	25-	618	0.9	0.06	60			I2/m (12)	8.45	13.03	7.18	362	4	2.556
6>	() Sanidine - (K,Na)(Si3Al)O8		19-	1227	1.0	0.00	69			I2/m (12)	8.32	13.00	7.17	353	4	
7>	() Schultenite, syn - PbHAsO4	+	29-	772	1.0	0.18	70	7.6		P2/a (13)	5.84	6.75	4.86	191	2	6.041
8>	() Scorzalite - (Fe,Mg)Al2(PO4)2(OH	+	35-	632	1.0	0.00	70	0.9		P21/n (14)	7.16	7.30	7.14	326	2	3.304
9>	() Microcline, intermediate - KAlSi	+	22-	675	1.0	0.12	59			P-1 (2)	7.72	7.82	7.21	360	2	2.565
10>	() Lanarkite, syn - Pb2OSO4	+	37-	516	1.0	0.00	73			I2/m (12)	12.43	5.70	7.08	250	4	6.999
11>	() Hentschelite - CuFe2(PO4)2(OH)2		40-	501	1.0	0.06	60			P21/n (14)	7.27	7.79	6.98	350	2	3.789
12>	() Celestine, barian - (Sr,Ba)SO4	+	41-	1387	1.1	0.00	76			Pbnm (62)	6.96	8.51	5.41	320	4	4.223
13>	() Ferrosilite, magnesian - (Fe,Mg)		31-	635	1.1	0.00	82			Pcab (61)	9.02	18.40	5.24	869	16	3.830
14>	() Gismondine - CaAl2Si2O8.4H2O	+	20-	452	1.1	0.00	67			P21/c (14)	10.02	10.61	9.84	1046	4	2.224
15>	() Kehoeite [NR] - (Zn,Ca)Al2P2H6O1		27-	94	1.1	0.00	82			P ()	13.45	13.45	13.45	2433	8	2.340
16>	() Ferrobustamite - (Ca,Fe,Mn)3Si3O		29-	336	1.1	0.00	64	1.2		P-1 (2)	7.85	7.86	7.25	385	2	3.090
17>	() Yagiite - (Na3,K)3Mg4(Al,Mg)6(Si		21-	1365	1.2	0.00	82			P6/mcc (192)	10.09	10.09	14.29	1260	1	
18>	() Microcline, ordered - KAlSi3O8	+	22-	687	1.2	0.00	73			P-1 (2)	7.62	7.91	7.22	360	2	2.567
19>	() Tsunehite - CuPb2(PO4)(SO4)(OH)	+	29-	568	1.2	0.00	74			P21/m (11)	8.69	5.78	7.86	366	2	6.218
20>	() Paragonite-2\ITM\RG#1, syn - NaA	+	42-	602	1.2	0.00	75			A2/a (15)	19.30	8.89	5.14	440	4	2.885
21>	() Stronalsite - Na2SrAl(SiO4)4	+	40-	1451	1.2	0.00	66			Ilma (72)	9.90	16.73	8.41	697	4	2.938
22>	() Sepiolite - Mg4Si6O15(OH)2.16H2O	+	26-	1226	1.2	0.00	62			Pnca (52)	13.43	26.88	5.28	1906	4	2.257
23>	() Cuprorivaite, syn - CaCuSi4O10	+	12-	512	1.2	0.12	61			P4/ncc (130)	7.30	7.30	15.12	806	4	3.099
24>	() Carminite - PbFe2(AsO4)2(OH)2	+	39-	1355	1.2	-0.06	77			Amaa (66)	12.29	16.59	7.58	773	8	5.421
25>	() Quartz, syn - SiO2	+	33-	1161	1.3	0.00	73	3.6		P3221 (154)	4.91	4.91	5.41	113	3	2.649
26>	() Osumilite-(Mg), syn - KMg2Al3(Si	+	29-	1016	1.3	0.00	82			P6/mcc (192)	10.08	10.08	14.32	1259	2	2.641
27>	() Wollastonite-\IT1A\RG, ferroan -		27-	1056	1.3	0.06	59			P-1 (2)	7.26	7.86	6.99	387	6	3.070
28>	() Bustamite, ferroan - (Ca,Mn)3Si3		26-	1066	1.3	0.00	90			P-1 (2)	7.72	7.75	7.14	368	8	3.410
29>	() Anorthite, sodian, ordered - (Ca		20-	528	1.3	0.00	55			P-1 (2)	12.87	12.91	8.18	1340	8	
30>	() Lanarkite, syn - Pb2(SO4)O	+	33-	1486	1.3	0.00	73			I2/m (12)	12.42	5.70	7.07	249	4	7.019
31>	() Albite, ordered - NaAlSi3O8	+	20-	572	1.3	0.00	87			P-1 (2)	7.60	7.64	7.11	334	2	2.611
32>	() Arsentsumebite - Pb2Cu(SO4)(AsO4		25-	456	1.3	0.00	73			P21/m (11)	8.85	5.92	7.84	379	2	6.393
33>	() Duftite - PbCuAsO4(OH)	+	42-	1444	1.3	0.06	73			P212121 (19)	7.78	9.21	6.00	430	4	6.596
34>	() Heterosite, manganian - (Fe0.65M	+	42-	579	1.3	0.00	37			Pnmb (62)	5.83	9.79	4.77	272	4	3.673
35>	() Celestine, barian, syn - Ba0.25S	+	39-	1467	1.3	-0.06	73			Pbnm (62)	6.94	8.48	5.39	317	4	4.107
36>	() Caminite - Mg3(SO4)2(OH)2	+	39-	359	1.3	0.00	76			I41/amd (141)	5.25	5.25	12.99	179	2	2.775
37>	() Celsian, syn - BaAl2Si2O8	+	38-	1450	1.3	0.00	76			I2/m (12)	8.59	13.05	7.20	368	4	3.390
38>	() Macphersonite - Pb4SO4(CO3)2(OH)	+	38-	354	1.3	0.00	77			Pcab (61)	10.37	23.10	9.25	2216	8	6.468
39>	() Unnamed mineral, syn [NR] - Fe3(	+	37-	481	1.3	0.06	73			P21/n (14)	9.10	10.05	8.02	672	4	3.710
40>	() Natrophilite - NaMnPO4	+	25-	846	1.4	0.00	24			Pnnb (62)	6.31	10.52	4.99	331	4	3.467

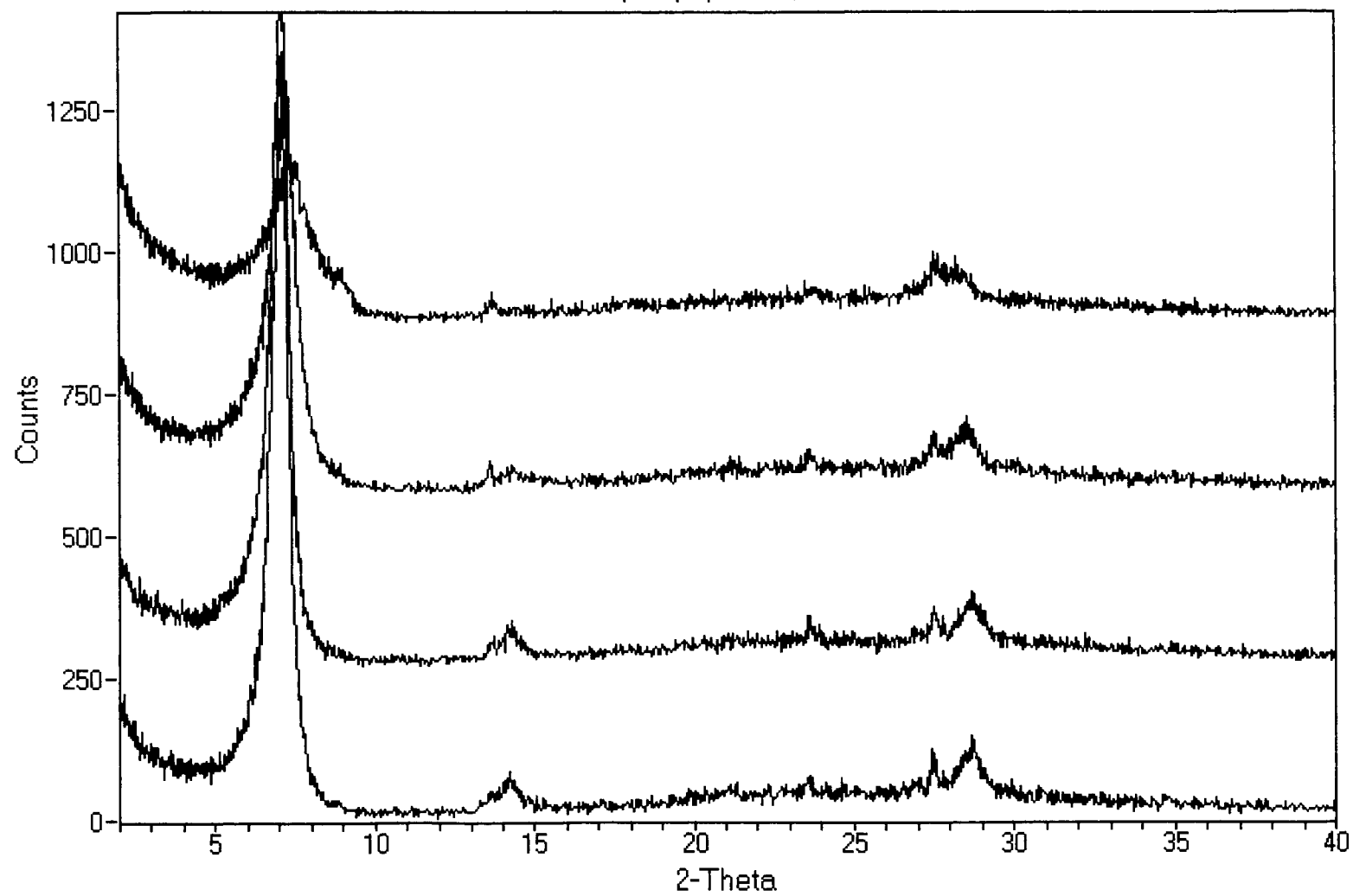
* QM - ? for Doubtful Quality or Non-ambient patterns; + for Indexed patterns with Space-Group, Unit Cell & Density.

* vol - reduced-cell volume; dx - measured density if calculated is not available.

ID: 3/28/94 - NOPI-371-GLY

File: NOPI371B.MDI

Scan: 2- 40/.02/1/#1901, Anode: CU

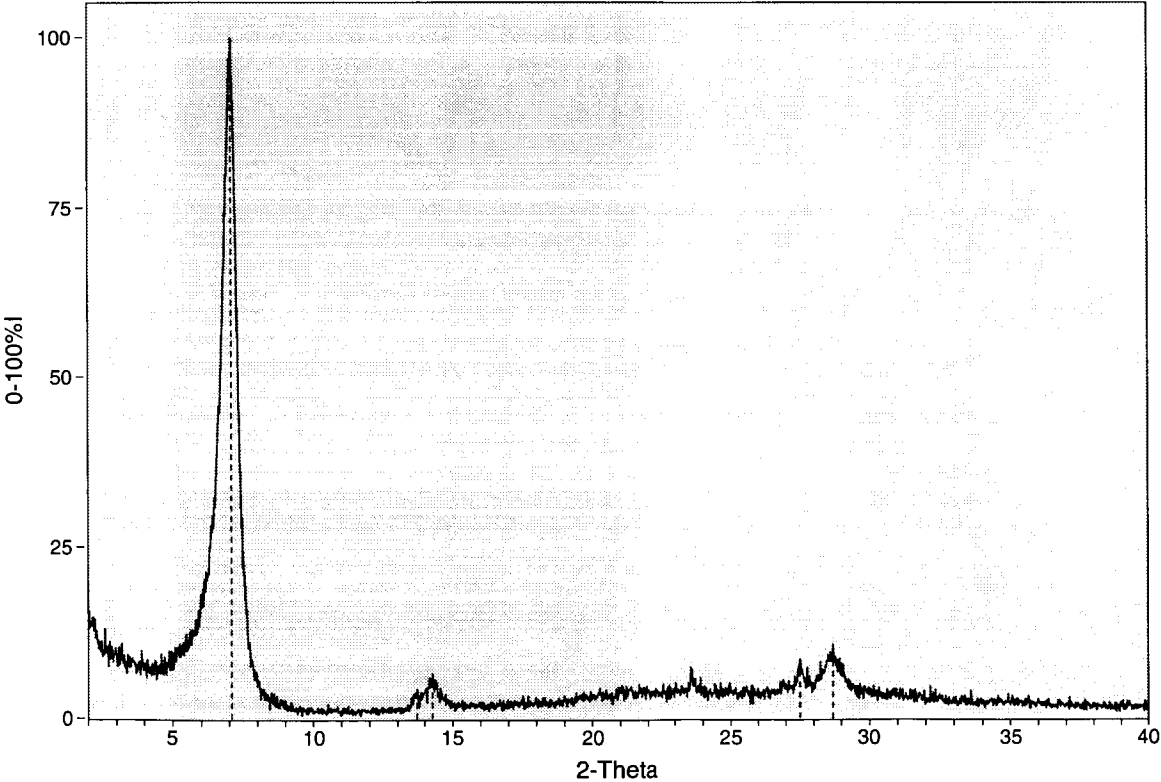


ID: 3/18/94 - NOPI-371-AD

File: NOPI371A.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Fri Mar 18 1994 @2:33pm

=====

File: NOPI371A.MDI> 3/18/94 - NOPI-371-AD

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 40
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 1.0
Intensity cutoff(%) = 1.0-100
2-Theta Zero (deg) = 0

Peak-Position Centroid-Position Peak & Area are without Bkgrd

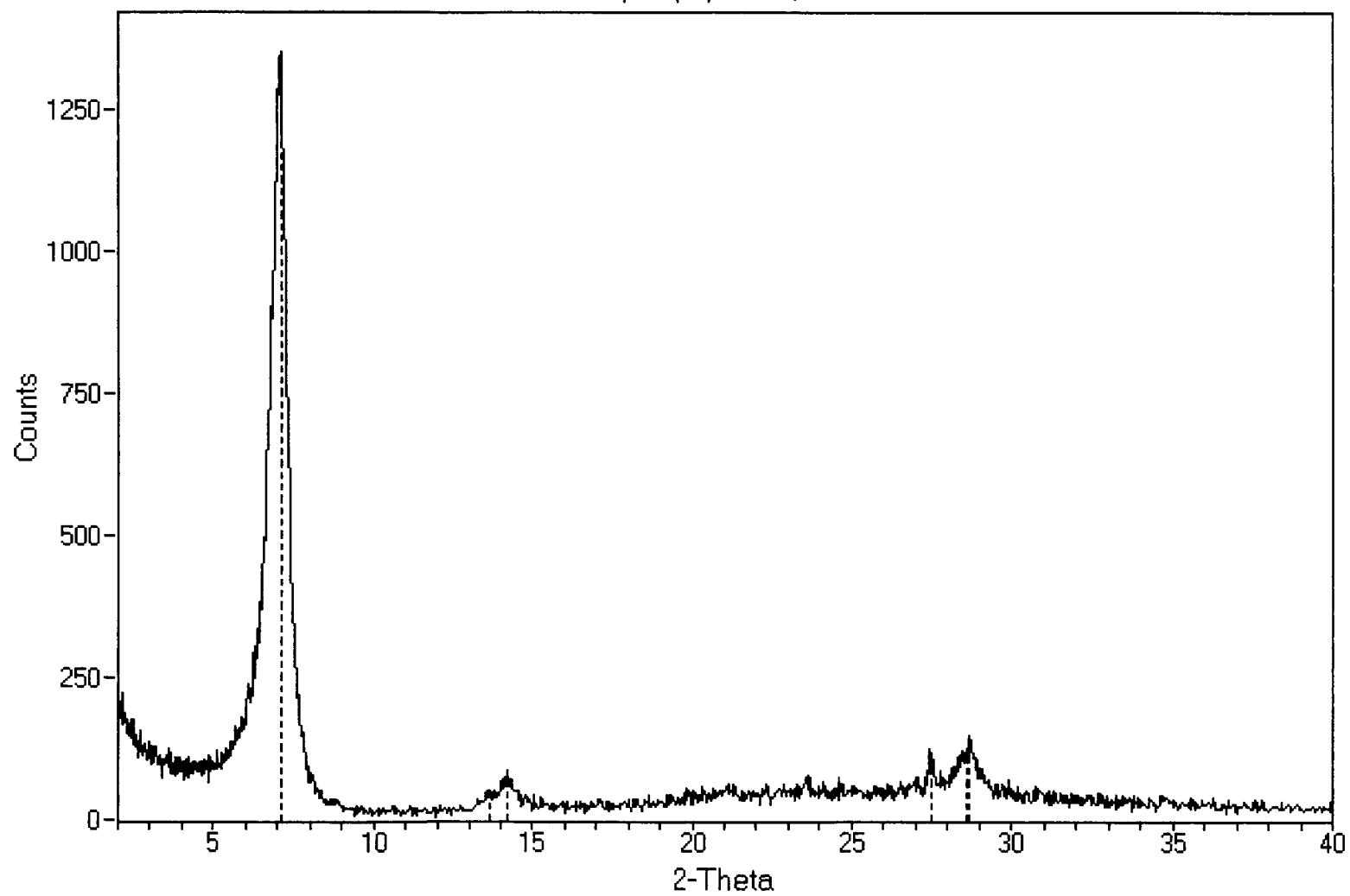
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.080	12.4755	7.068	12.4966	65	1172	100.0	43179	100.0	0.663
2:	13.719	6.4495	13.755	6.4329	15	38	3.2	783	1.8	0.371
3:	14.280	6.1975	14.273	6.2002	15	66	5.6	2218	5.1	0.605
4:	27.501	3.2407	27.517	3.2388	45	62	5.3	1552	3.6	0.451
5:	28.700	3.1080	28.693	3.1087	42	91	7.8	4207	9.7	0.832

* Intensity values are based on total raw counts.

ID: 3/28/94 - NOPI-371-GLY

File: NOPI371B.MDI

Scan: 2- 40/.02/1/#1901, Anode: CU



File: NOPI371B.MDI> 3/28/94 - NOPI-371-GLY

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           || Filter length(pts)   = 25
Scan Range  = 2- 40                 || Noise level(sigmas)  = 5.0
Step Size   = .02                   || Intensity cutoff(%)  = .5-100
Count Time  = 1 sec.                || 2-Theta Zero (deg)  = 0
-----
  
```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.080	12.4761	7.079	12.4775	63	1286	100.0	675	100.0	0.472
2:	13.676	6.4695	13.672	6.4714	16	36	2.8	5	0.7	0.125
3:	14.221	6.2229	14.221	6.2231	17	69	5.4	21	3.1	0.274
4:	27.461	3.2454	27.461	3.2454	48	75	5.8	6	0.9	0.072
5:	28.600	3.1187	28.600	3.1187	44	82	6.4	18	2.7	0.198
6:	28.700	3.1080	28.700	3.1080	44	106	8.2	11	1.6	0.093

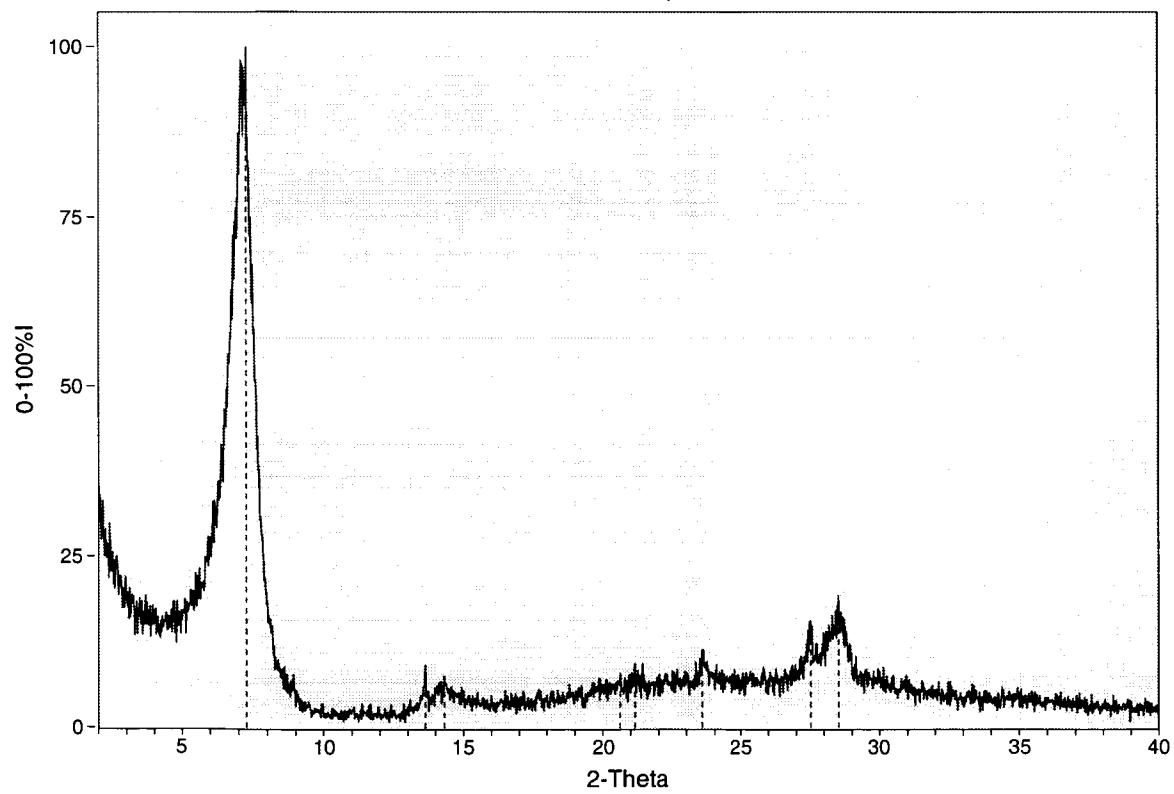
* Intensity values are based on total raw counts.

ID: 3/18/94 - NOPI-371-400 deg.C

File: NOPI371C.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



```

=====
Jade: Peak Listing                               Fri Mar 18 1994 @2:36pm
=====
File: NOPI371D.MDI> 3/18/94 - NOPI-371-550 deg.C

```

```

----- Scan Parameters: ----- Search Parameters: -----
Radiation   = CU_1.540598           Filter length(pts) = 25
Scan Range  = 2 - 40                Noise level(sigmas) = 1.0
Step Size   = .02                   Intensity cutoff(%) = 1.0-100
Count Time  = 1 sec.                2-Theta Zero (deg) = 0
-----

```

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.141	12.3693	7.164	12.3296	75	201	87.4	14702	89.2	1.317
2:	7.320	12.0673	7.327	12.0558	66	230	100.0	16019	97.2	1.254
3:	7.360	12.0016	7.363	11.9970	68	228	99.1	15378	93.3	1.214
4:	7.559	11.6851	7.537	11.7204	61	226	98.3	16488	100.0	1.313
5:	13.682	6.4670	13.689	6.4637	19	39	17.0	323	2.0	0.149
6:	17.959	4.9351	17.963	4.9341	27	22	9.6	593	3.6	0.485
7:	18.360	4.8284	18.333	4.8354	28	18	7.8	260	1.6	0.260
8:	26.842	3.3187	26.864	3.3161	48	28	12.2	459	2.8	0.295
9:	27.502	3.2406	27.525	3.2380	45	81	35.2	3538	21.5	0.786
10:	28.159	3.1664	28.155	3.1669	42	76	33.0	3768	22.9	0.892
11:	28.360	3.1445	28.339	3.1468	43	54	23.5	2807	17.0	0.936

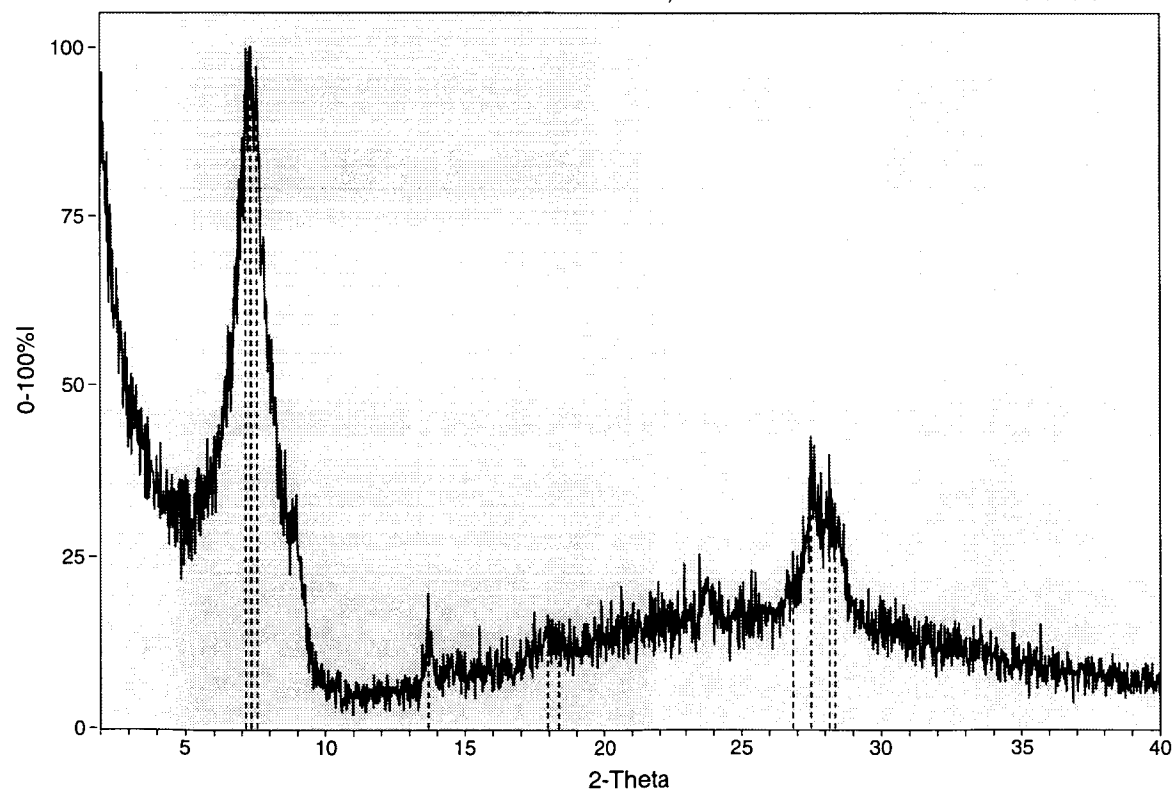
* Intensity values are based on total raw counts.

ID: 3/18/94 - NOPI-371-550 deg.C

File: NOPI371D.MDI

Scan: 2-40/.02/1/#1901, Anode:CU

Zero=0.0



=====

Jade: Peak Listing

Fri Mar 18 1994 @2:35pm

=====

File: NOPI371C.MDI> 3/18/94 - NOPI-371-400 deg.C

----- Scan Parameters: ----- Search Parameters: -----

Radiation = CU_1.540598	Filter length(pts) = 25
Scan Range = 2 - 40	Noise level(sigmas) = 1.0
Step Size = .02	Intensity cutoff(%) = 1.0-100
Count Time = 1 sec.	2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	7.279	12.1344	7.257	12.1722	77	653	100.0	32826	100.0	0.905
2:	13.639	6.4871	13.641	6.4860	16	51	7.8	1302	4.0	0.460
3:	14.320	6.1800	14.311	6.1838	16	39	6.0	2234	6.8	1.031
4:	20.639	4.3001	20.626	4.3027	34	24	3.7	967	2.9	0.725
5:	21.161	4.1952	21.163	4.1948	36	32	4.9	460	1.4	0.259
6:	23.562	3.7728	23.593	3.7679	42	41	6.3	595	1.8	0.261
7:	27.518	3.2387	27.525	3.2379	48	65	10.0	2063	6.3	0.571
8:	28.520	3.1272	28.518	3.1275	47	93	14.2	3078	9.4	0.596

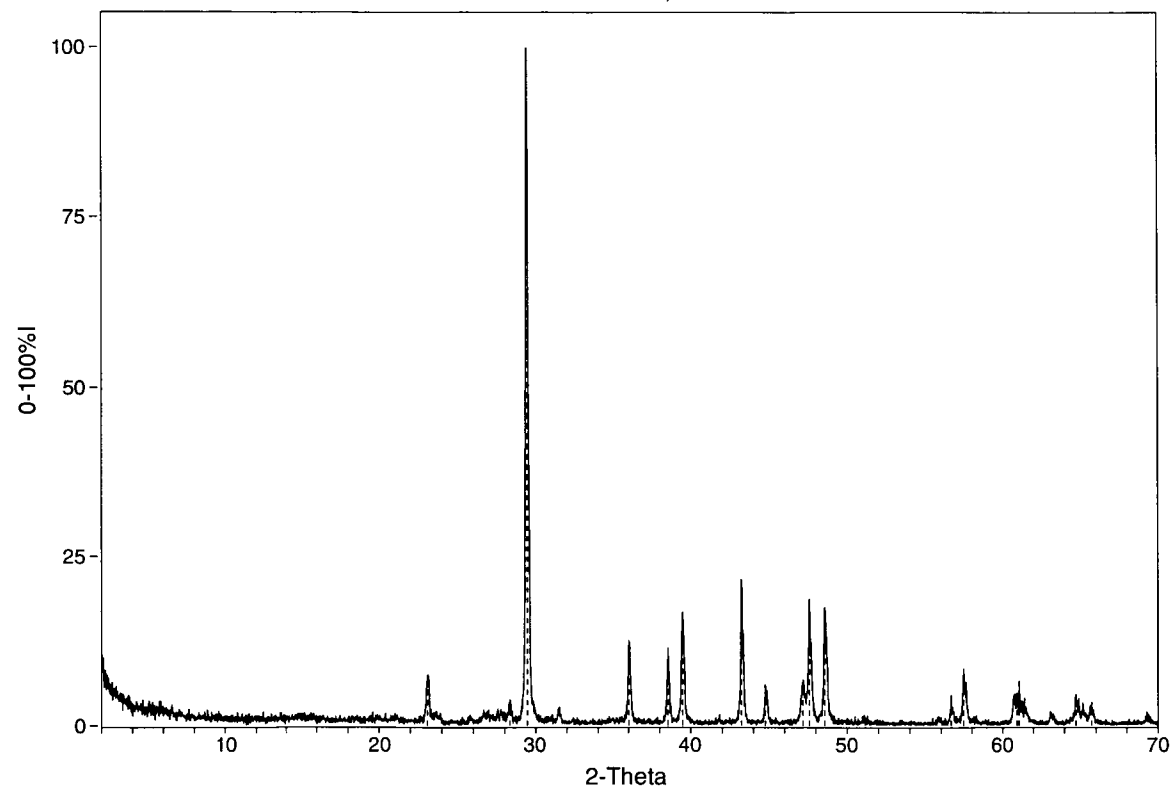
* Intensity values are based on total raw counts.

ID: 3/23/94 - NOPI-371-XRD2

File: NOPI3712.MDI

Scan: 2-70/.02/1/#3401, Anode:CU

Zero=0.0



File: NOPI3712.MDI> 3/23/94 - NOPI-371-XRD2

----- Scan Parameters: -----

Radiation = CU_1.540598
Scan Range = 2 - 70
Step Size = .02
Count Time = 1 sec.

----- Search Parameters: -----

Filter length(pts) = 25
Noise level(sigmas) = 3.0
Intensity cutoff(%) = 2.0-100
2-Theta Zero (deg) = 0

Peak-Position		Centroid-Position		Peak & Area are without Bkgrd						
#	2Theta	d	2Theta	d	Bkgrd	Peak	I%	Area	I%	FWHM*
1:	23.081	3.8503	23.097	3.8477	4	68	7.1	805	7.4	0.213
2:	28.340	3.1467	28.333	3.1475	6	31	3.3	287	2.6	0.167
3:	29.460	3.0295	29.460	3.0296	6	952	100.0	10856	100.0	0.205
4:	36.021	2.4913	36.041	2.4900	3	117	12.3	1313	12.1	0.202
5:	38.540	2.3341	38.544	2.3338	3	106	11.1	998	9.2	0.169
6:	39.481	2.2806	39.490	2.2801	3	157	16.5	1883	17.3	0.216
7:	43.223	2.0915	43.257	2.0898	3	204	21.4	2024	18.6	0.179
8:	44.763	2.0230	44.789	2.0219	3	55	5.8	509	4.7	0.167
9:	47.160	1.9256	47.184	1.9247	4	61	6.4	959	8.8	0.283
10:	47.581	1.9095	47.588	1.9093	3	176	18.5	2833	26.1	0.290
11:	48.562	1.8732	48.600	1.8719	3	164	17.2	2233	20.6	0.245
12:	56.642	1.6237	56.665	1.6231	2	41	4.3	320	2.9	0.140
13:	57.462	1.6025	57.508	1.6013	2	78	8.2	1063	9.8	0.245
14:	60.921	1.5195	60.926	1.5194	2	44	4.6	1196	11.0	0.489
15:	61.079	1.5159	61.056	1.5164	2	61	6.4	1474	13.6	0.435
16:	64.721	1.4391	64.763	1.4383	3	41	4.3	556	5.1	0.244
17:	65.719	1.4197	65.702	1.4200	2	31	3.3	432	4.0	0.251

* Intensity values are based on total raw counts.