

AM-86-301

Cd 1 of 1

Neutron diffraction studies of sillimanite

R. C. Peterson and R. K. McMullan

Table 4 for deposit

American Mineralogist, 71, 5-6, 742-745. pp (1)1-5(1)

Copy 1986 Amer. Geol. Union

1 Cd 10 copies

Total 10

Table 4

FO**2 - FC**2 LIST FOR SILLIMANITE
NEUTRON DATA AT 298K. F**2 VALUES ARE ON ABSOLUTE SCALE IN BARNs.

```
*****  
*  
* H.K.L --- INDICES OF REFLECTIONS.  
*  
* FO**2 --- SQUARED OBSERVED STRUCTURE FACTOR (CORRECTED FOR EXTINCTION).  
*  
* FC**2 --- SQUARED CALCULATED STRUCTURE FACTOR.  
*  
* SIGM ----- ESTIMATED STANDARD DEVIATION OF FO**2.  
*  
* EXT ----- EXTINCTION FACTOR (X1000) FOR FO**2.  
*****
```


FD**2 -- FC**2 LIST FOR SILLIMANITE

PAGE 5

FC**2	EXT	SIGM	FC**2	SIGM	EXT	FC**2	SIGM	FC**2	SIGM	EXT	FC**2	SIGM	FC**2	SIGM	EXT
1.20	1000	.21	1.26	.21	598	1.00	.26	1.29	.26	598	1.25	.26	1.25	.26	1000
.00	1000	.22	.00	.22	1000	1.20	.24	.00	.24	1000	.00	.24	.00	.24	1000
3.11	596	.24	3.05	.24	596	3.05	.26	3.11	.26	596	3.05	.24	3.05	.24	596
152.34	597	.25	145.73	.25	597	145.73	.27	152.34	.27	597	145.73	.25	145.73	.25	597
1.49	599	1.15	1.50	1.15	599	1.50	1.18	1.49	1.18	599	1.50	1.15	1.50	1.15	599
54.40	567	.58	34.05	.58	567	34.05	.60	54.40	.60	567	34.05	.58	34.05	.58	567
1.61	588	.18	1.54	.18	588	1.54	.20	1.61	.20	588	1.54	.18	1.54	.18	588
10.02	588	.26	10.21	.26	588	10.21	.28	10.02	.28	588	10.21	.26	10.02	.26	588
.45	595	.21	.44	.21	595	.44	.24	.45	.24	595	.44	.21	.44	.21	595
.45	1000		.52		1000	.52		.45		1000	.52		.45		1000
1.20			1.26			1.26		1.20			1.26		1.20		
.00			.00			.00		.00			.00		.00		
3.11			3.05			3.05		3.11			3.05		3.11		
152.34			145.73			145.73		152.34			145.73		152.34		
1.49			1.50			1.50		1.49			1.50		1.49		
54.40			34.05			34.05		54.40			34.05		54.40		
1.61			1.54			1.54		1.61			1.54		1.61		
10.02			10.21			10.21		10.02			10.21		10.02		
.45			.44			.44		.45			.44		.45		
.45			.52			.52		.45			.52		.45		
1.20			1.26			1.26		1.20			1.26		1.20		
.00			.00			.00		.00			.00		.00		
3.11			3.05			3.05		3.11			3.05		3.11		
152.34			145.73			145.73		152.34			145.73		152.34		
1.49			1.50			1.50		1.49			1.50		1.49		
54.40			34.05			34.05		54.40			34.05		54.40		
1.61			1.54			1.54		1.61			1.54		1.61		
10.02			10.21			10.21		10.02			10.21		10.02		
.45			.44			.44		.45			.44		.45		
.45			.52			.52		.45			.52		.45		