

## Electron Microprobe Data

Rruff ID: **R050355**

Mineral: **Powellite**

**Locality:** Nasik, India

### Weight Percents

Analysis	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#16	#17	#18	#19	#20	Average	StDev
CaO	27.29	27.34	27.45	27.28	27.37	27.24	27.33	27.31	27.03	27.14	27.25	27.23	27.54	27.19	27.33	27.17	27.02	27.27	0.13
MoO <sub>3</sub>	73.05	73.3	73.21	72.56	72.46	72.8	72.84	72.94	73.28	73.89	72.66	73.35	73.23	73.24	72.88	72.63	71.81	72.95	0.46
Totals	100.4	100.6	100.7	99.84	99.83	100.1	100.2	100.2	100.3	101	99.91	100.6	100.8	100.4	100.2	99.8	98.83	100.21	0.50

### Cation numbers normalized to 4 Oxygens

																		ACN	StDev	NCN	CNISF*
Ca	0.97	0.97	0.97	0.97	0.98	0.97	0.97	0.97	0.96	0.96	0.97	0.96	0.97	0.96	0.97	0.97	0.97	0.97	0.01	0.99	1.00
Mo	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.02	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	0.00	1.01	1.00
Cation	1.98	1.98	1.98	1.98	1.99	1.98	1.98	1.98	1.97	1.97	1.98	1.98	1.98	1.98	1.98	1.98	1.98	1.98	0.00	2.00	

Ideal Chemistry:  $\text{CaMoO}_4$

Calculated chemistry:  $\text{Ca}_{1.00}\text{Mo}_{1.00}\text{O}_4$

Instrument: Cameca SX50  
Sample Voltage: 15 kV  
Acceleration Current: 20 nA  
Beam Size: spot  
Date of Analysis: 05/05/2006

### Microprobe Calibration Data

Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
PET	Ca	La	20	10	500	-500	diopside
PET	Mo	Ka	20	10	300	-500	wulfenite

ACN: Average Number of Cations

NCN: Normalized Cation Numbers (NCN = ACN\*2/1.98)

StDev: Standard Deviation

CNISF: Cation Numbers In Structural Formulae

\* = normalized for each structural site and charge balanced