

## Electron Microprobe Data

Ruff ID: **R060300**

Mineral: **Lecucite**

Locality: Alban Hills, Rome Province, Latium, Italy

### Weight Percents

Analysis	#21	#22	#23	#29	#33	#38	#40	Average	StDev
SiO <sub>2</sub>	54.85	55.05	55.19	54.83	54.45	55.03	54.92	54.90	0.22
Al <sub>2</sub> O <sub>3</sub>	23.21	22.95	23.20	22.99	23.11	23.09	23.09	23.09	0.09
Na <sub>2</sub> O	0.17	0.24	0.23	0.23	0.27	0.25	0.19	0.22	0.03
K <sub>2</sub> O	20.97	20.75	20.78	21.20	20.96	20.89	20.89	20.92	0.14
BaO	0.13	0.09	0.15	0.16	0.27	0.15	0.08	0.15	0.06
Totals	99.33	99.09	99.56	99.41	99.07	99.40	99.16	99.29	0.17

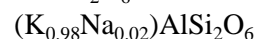
### Cation numbers normalized to 6 Oxygens

	ACN	StDev	NCN	CNISF*
Si	2.00	2.01	2.01	2.01
Al	1.00	0.99	1.00	0.99
Na	0.01	0.02	0.02	0.02
K	0.98	0.97	0.96	0.99
Totals	3.99	3.99	4.00	4.00

Ideal Chemistry:



Calculated Chemistry:



minor amounts of Ba

Instrument: Cameca SX50

Sample Voltage: 15 kV

Acceleration Current: 20 nA

Beam Size: Spot

Date of Analysis: 06/10/06

ACN: Average Number of Cations

NCN: Normalized Cation Numbers = ACN\*4/3.99

StDev: Standard Deviation

CNISF=Cation Numbers in structural formulae

\*=cations normalized for each structural site

### Microprobe Calibration Data

Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
TAP	Na	Ka	20	10	600	-600	Albite-Cr
TAP	Si	Ka	20	10	600	-600	Diopside
TAP	Al	Ka	20	10	600	-600	Anorthite-S
PET	K	Ka	20	10	600	-600	K-spar-OR1
LIF	Ba	La	20	10	500	-500	NBS_K458