Electron Microprobe Data

Rruff ID: **R060300** Mineral: **Lecucite**
Locality: Alban Hills, Rome Province, Latium, Italy

Weight Percents

Analysis	#21	#22	#23	#29	#33	#38	#40	Average	StDev
SiO_2	54.85	55.05	55.19	54.83	54.45	55.03	54.92	54.90	0.22
Al_2O_3	23.21	22.95	23.20	22.99	23.11	23.09	23.09	23.09	0.09
Na_2O	0.17	0.24	0.23	0.23	0.27	0.25	0.19	0.22	0.03
K_2O	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	2.00	2.01	2.01	2.01	0.00	2.01	2.00
Al	1.00	0.99	1.00	0.99	1.00	0.99	0.99	0.99	0.00	1.00	1.00
Na	0.01	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.00	0.02	0.02
K	0.98	0.97	0.96	0.99	0.98	0.97	0.97	0.98	0.01	0.98	0.98
Totals	3.99	3.99	3.99	4.00	4.00	3.99	3.99	3.99	0.01	4.00	

Ideal Chemistry: $KAlSi_2O_6$
Calculated Chemistry: $(K_{0.98}Na_{0.02})AlSi_2O_6$
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(-)
TAP	Na	Ka	20	10	600	-600
TAP	Si	Ka	20	10	600	-600
TAP	Al	Ka	20	10	600	-600
PET	K	Ka	20	10	600	-600
LIF	Ba	La	20	10	500	-500

Standards
Albite-Cr
Diopside
Anorthite-S
K-spar-OR1
NBS_K458