Electron Microprobe Data

Rruff ID: **R060313** Mineral: **Sanidine**
Locality: Eifel Mountains, Rhineland-Palatinate, Germany

Weight Percents

Analysis	#1	#2	#3	#4	#5	#6	#7	#11	#13	#14	#15	#16	#18	#19	Average	StDev
SiO_2	64.87	64.75	64.33	64.66	64.23	64.31	64.00	64.35	64.11	64.48	63.92	64.17	64.48	64.29	64.35	0.26
Al_2O_3	18.63	18.47	18.65	18.37	18.54	18.56	18.60	18.47	18.54	18.41	18.44	18.43	18.46	18.38	18.50	0.09
BaO	0.56	0.79	0.68	0.81	0.79	0.66	0.89	0.74	0.69	0.49	0.78	0.76	0.92	0.78	0.74	0.11
Na_2O	1.42	1.46	1.62	1.61	1.47	1.46	1.38	1.52	1.50	1.65	1.48	1.45	1.47	1.55	1.50	0.07
K_2O	14.47	14.43	14.39	14.59	14.45	14.51	14.30	14.35	14.44	14.38	14.45	14.37	14.26	14.49	14.42	0.08
Totals	99.95	99.90	99.68	100.04	99.49	99.50	99.18	99.43	99.28	99.39	99.07	99.18	99.59	99.49	99.51	0.29

Cation numbers normalyzed to 8 Oxygens															ACN	StDev	NCN	CNISF*
Si	2.99	2.99	2.98	2.99	2.98	2.99	2.98	2.99	2.98	2.99	2.98	2.99	2.99	2.99	2.99	0.00	2.99	2.96
Al	1.01	1.01	1.02	1.00	1.02	1.02	1.02	1.01	1.02	1.01	1.01	1.01	1.01	1.01	1.01	0.01	1.01	1.04
Ba	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.00	0.01	0.01
Na	0.13	0.13	0.15	0.14	0.13	0.13	0.13	0.14	0.14	0.15	0.13	0.13	0.13	0.14	0.14	0.01	0.14	0.14
K	0.85	0.85	0.85	0.86	0.86	0.86	0.85	0.85	0.86	0.85	0.86	0.85	0.84	0.86	0.85	0.01	0.85	0.85
Totals	4.99	5.00	5.01	5.01	5.00	5.00	4.99	5.00	5.01	5.01	5.01	5.00	4.99	5.01	5.00	0.01	5.00	

Ideal Chemistry: $KAlSi_3O_8$
Calculated Chemistry: $(K_{0.85}Na_{0.14}Ba_{0.01})Al_{1.04}Si_{2.96}O_8$

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*5/4.99
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
PET	Ca	Ka	20	10	600	-600	Diopside
LIF	Ba	La	20	10	500	-500	NBS_K458