

Electron Microprobe Data

Ruff ID: **R050185**

Mineral: **Orthoclase**

Locality: Silica Bell Property, west of Hope, British Columbia, Canada

Weight Percents

Analysis	#23	#24	#26	#27	#29	#32	#33	#34	#35	Average	StDev
SiO ₂	66.06	65.89	65.66	65.64	66.02	66.06	66.37	65.87	65.72	65.92	0.23
Al ₂ O ₃	19.22	19.20	19.10	19.15	18.93	19.31	19.44	19.25	19.25	19.21	0.14
MnO	0.03	0.00	0.03	0.00	0.00	0.02	0.00	0.00	0.01	0.01	0.01
K ₂ O	14.58	14.87	15.34	15.35	14.77	14.91	14.60	14.85	15.10	14.93	0.28
Na ₂ O	0.25	0.43	0.49	0.39	0.49	0.43	0.47	0.49	0.45	0.43	0.08
Totals	100.14	100.39	100.62	100.53	100.21	100.73	100.88	100.46	100.53	100.50	0.23

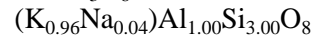
Cation numbers normalized to 8 Oxygens

										ACN	StDev	NCN	CNISF*
Si	3.01	3.00	3.00	3.00	3.01	3.00	3.00	3.00	3.00	3.00	0.01	3.04	3.00
Al	1.03	1.03	1.03	1.03	1.02	1.03	1.04	1.03	1.03	1.03	0.01	1.04	1.00
K	0.85	0.86	0.89	0.89	0.86	0.86	0.84	0.86	0.88	0.87	0.02	0.88	0.96
Na	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.01	0.04	0.04
Totals	4.91	4.94	4.96	4.95	4.93	4.94	4.92	4.94	4.95	4.94	0.01	5.00	

Ideal Chemistry:



Calculated Chemistry:



Trace amounts of Mn

Instrument: Cameca SX50

Sample Voltage: 15 kV

Acceleration Current: 20 nA

Beam Size: Spot

Date of Analysis: 8/15/2005

ACN: Average Number of Cations

NCN: Normalized Cation Numbers = ACN*8/7.995

StDev: Standard Deviation

CNISF=Cation Numbers in structural formulae

*=cations normalized for each structural site and charge balanced

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	kspar-OR
TAP	Al	Ka	20	10	600	-600	kspar-OR
TAP	Mg	Ka	20	10	600	-600	diopside
PET	K	Ka	20	10	600	-600	kspar-OR1
PET	Ca	Ka	20	10	600	-600	wollast
LIF	Mn	Ka	20	10	500	-500	rhod-791
LIF	Fe	Ka	20	10	500	-500	fayalite