

## Electron Microprobe Data

Ruff ID: **R060598**

Mineral: **Metarossite**

Locality: Arrowhead Claim, San Miguel County, Colorado, USA

### Weight Percents

Analysis	#9	#14	#15	#16	#17	#18	#20	Average	StDev
Al <sub>2</sub> O <sub>3</sub>	0.19	0.48	0.35	0.37	0.37	0.48	0.80	0.43	0.19
CaO	17.57	17.05	17.44	16.35	16.59	17.25	16.88	17.02	0.44
V <sub>2</sub> O <sub>5</sub>	61.19	58.97	61.19	57.52	57.35	60.43	58.88	59.36	1.62
Totals	78.94	76.49	78.97	74.24	74.31	78.16	76.55	76.81	2.00
H <sub>2</sub> O*	21.06	23.51	21.03	25.76	25.69	21.84	23.45	23.19	2.00

\* = calculated values

### Cation numbers normalized to 6 Oxygens

	ACN	StDev	NCN	CNISF**
Al	0.01	0.03	0.02	0.03
Ca	0.94	0.94	0.93	0.94
V	2.02	2.01	2.02	2.01
Totals	2.97	2.98	2.97	2.98

Ideal Chemistry: CaV<sup>5+</sup><sub>2</sub>O<sub>6</sub>·2H<sub>2</sub>O

Calculated Chemistry: (Ca<sub>0.95</sub>Al<sub>0.03</sub>?<sub>0.02</sub>)V<sup>5+</sup><sub>2.00</sub>O<sub>6</sub>·2H<sub>2</sub>O

### Microprobe Calibration Data

Instrument: Cameca SX50	Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
Sample Voltage: 15 kV	TAP	Al	Ka	20	10	300	-500	spinel
Acceleration Current: 10 nA	PET	V	Ka	20	10	250	-350	v_1
Beam Size: 10	PET	Ca	Ka	20	10	500	-350	wollast

Date of Analysis: 06/03/2006

ACN: Average Number of Cations

NCN: Normalized Cation Numbers = ACN\*3.00/2.97

StDev: Standard Deviation

CNISF: Cation Number in Structural Formulae

\*\* = normalized for each structural site and charge balanced