

## Electron Microprobe Data

Ruff ID: **R050455**

Mineral: **Brucite**

Locality: Texas, Lancaster County, Pennsylvania, USA

### Weight Percents

Analysis	#1	#3	#4	#5	#6	#7	#8	#9	#10	#12	#13	#14	#15	#16	#17	#18	#20	Average	StDev
Mg	68.45	68.57	68.38	68.57	68.10	68.47	67.82	67.79	68.17	68.03	68.14	68.38	68.44	68.81	68.39	68.32	68.56	68.32	0.27
Mn	1.15	1.17	1.06	1.21	1.19	1.21	1.35	1.74	1.66	1.74	1.40	1.30	1.10	1.08	1.09	1.04	1.12	1.27	0.23
Fe	0.03	0.00	0.04	0.00	0.08	0.02	0.03	0.04	0.00	0.03	0.04	0.02	0.03	0.05	0.07	0.01	0.00	0.03	0.02
Totals	69.62	69.74	69.47	69.79	69.37	69.69	69.21	69.57	69.83	69.80	69.58	69.70	69.56	69.94	69.55	69.37	69.68	69.62	0.19
H <sub>2</sub> O*	30.38	30.26	30.53	30.21	30.63	30.31	30.79	30.43	30.17	30.20	30.42	30.30	30.44	30.06	30.45	30.63	30.32	30.38	0.19

### Cation normalized to 2 OH

																		ACN	StDev	NCN
Mg	1.00	1.00	1.00	1.00	0.99	1.00	0.99	0.99	1.00	1.00	0.99	1.00	1.00	1.01	1.00	0.99	1.00	1.00	0.00	0.99
Mn	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cation	1.01	1.01	1.00	1.01	1.00	1.01	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.00	1.01	1.01	0.00	1.00

Ideal Chemistry: Mg(OH)<sub>2</sub>

Calculated Chemistry: (Mg<sub>0.99</sub>Mn<sub>0.01</sub>)(OH)<sub>2</sub>

minor amounts of Fe<sup>2+</sup> (<0.005 apfu)

Instrument: Cameca SX50

Sample Voltage: 15 kV

Acceleration Current: 10 nA

Beam Size: 10 microns

Date of Analysis: 05/05/2006

ACN: Average Number of Cations

NCN: Normalized Cation Numbers = ACN\*1/1.01

StDev: Standard Deviation

\* = calculated values

### Microprobe Calibration Data

Xtal	El	Line	Pk(s)	Bkg(s)	Bkg(+)	Bkg(-)	Standards
TAP	Mg	Ka	20	10	600	-600	diopside
PET	Mn	Ka	20	10	600	-600	rhod-791
LIF	Fe	Ka	20	10	500	-500	Fayalite