

Chlorite, Belvedere Mt., Vermont
 from chl-calc-ep vein
 Field # A - BM - 56 - 4b Lab # 14994
 wt%

SiO_2	32.18	30.65
$\text{AlO}_{3/2}$	16.07	18.04
$\text{FeO}_{3/2}$	.89	.64
FeO	1.38	1.10
MgO	33.88	48.10
CaO	.62	.63
$\text{NaO}_{1/2}$	.06	.11
$\text{KO}_{1/2}$	.03	.04
$\text{HO}_{1/2}^-$	.70	--
$\text{HO}_{1/2}^+$	13.94	--
TiO_2	.02	.01
CO_2	.35	--
$\text{PO}_{5/2}$	.03	.02
F	.01	--
$\text{CrO}_{3/2}$	.15	.11
NiO	.03	.02
CoO	.01	.01
MnO	.06	.05
CuO	.008	.006
VO_2	.002	.001
$\text{ScO}_{3/2}$.0008	.0006
<u>total</u>	<u>100.42</u>	<u>100.00</u>
$\text{HO}_{1/2}$	--	88.57
CO_2	--	.46
F	--	.03

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Chlorite Standard Rellit #1

Analyst: S.M. Berthold

Spectro: M. Seerveld

Note: Spectro. determinations of Ga, Y,
Yb, Zr, and Be = 0.

Arbitrary value based upon spectro.
report that Cr is in "tenths of a
percentage range."

If Ca, CO₂, Na, and K are simply dropped
as impurities, and if the formula is cal-
culated on the basis of Si + 1/2

(Al + Fe + Ti) = 4, on the assumption that
the determination of H₂O+ is high, the
chlorite formula is: (Mg_{4.81}Fe⁺².11Mn.005)
(Al_{.87}Fe⁺³.07Ti.003) (Si_{3.07}Al_{.93})₀_{9.43}(OH)_{8.86}

Optics: 2V=30°, Optic sign (+),
Elong. (-), α β = 1.576, = 1.580,
faint abnormal brown biref.