

Crystal Data: Hexagonal. *Point Group:* $\bar{3}$. Steep rhombohedra and hexagonal prism $\{11\bar{2}\ 0\}$ facet tabular crystals with scalloped and imperfect faces to 30 mm. Crystals flattened on $\{0001\}$. **Twinning:** Non-planar contact surfaces of multiple twins are approximately parallel to the *c* axis.

Physical Properties: *Cleavage:* None. *Fracture:* Conchoidal. *Tenacity:* Brittle. Hardness = 6 D(meas.) = 4.68(5) D(calc.) = 4.616

Optical Properties: Opaque. *Color:* Black. *Streak:* Brown. *Luster:* Submetallic.

Optical Class: Uniaxial (+). High birefringence.

R₁-R₂: (470) 12.78-15.39, (546) 12.86-15.43, (589) 12.91-15.55, (650) 13.04-15.75

Cell Data: *Space Group:* $R\bar{3}$. *a* = 10.4359(2) *c* = 21.0471(4) *Z* = 3

X-ray Powder Pattern: Novo Horizonte, Bahia, Brazil.

2.907 (100), 2.492 (55), 2.157 (55), 3.074 (50), 3.023 (50), 1.615 (50), 3.436 (48)

Chemistry:	(1)	(2)
CaO	0.12	
SrO	0.69	
PbO	7.13	11.72
MnO	2.64	3.73
ZnO	6.26	8.55
Fe ₂ O ₃	22.83	20.97
Y ₂ O ₃	2.81	
La ₂ O ₃	0.25	
TiO ₂	56.10	54.56
H ₂ O	0.4	0.47
Total	99.23	100.00

(1) Novo Horizonte, Bahia, Brazil; average of 5 electron microprobe analyses supplemented by IR and Mössbauer spectroscopy, H₂O by gas chromatography; corresponding to $(\text{Pb}_{0.59}\text{Sr}_{0.12}\text{Ca}_{0.04}\text{La}_{0.03})_{\Sigma=0.78}(\text{Mn}_{0.54}\text{Y}_{0.46})_{\Sigma=1.00}\text{Zn}_{1.43}(\text{Ti}_{13.02}\text{Fe}^{3+}_{4.98})_{\Sigma=18.00}(\text{Fe}^{3+}_{0.32}\text{Mn}_{0.15})_{\Sigma=0.47}[\text{O}_{37.18}(\text{OH})_{0.82}]_{\Sigma=38.00}$.

(2) $\text{PbMnZn}_2\text{Ti}_{13}\text{Fe}^{3+}_5\text{O}_{37}(\text{OH})$.

Mineral Group: Crichtonite group.

Occurrence: In altered dacite 2 meters from a hydrothermal quartz vein.

Association: Rutile, anatase, hematite, quartz, kaolinite, muscovite, xenotime-(Y), bastnaesite-(La).

Distribution: From Novo Horizonte, Bahia, Brazil.

Name: Honors Professor Fernando Flávio Marques de Almeida (1916-2013) for his work on the geology of Brazil and South America.

Type Material: Geology Museum, Institute of Geosciences, University of São Paulo, Brazil (DR744).

References: (1) Menezes Filho, L.A.D., N.V. Chukanov, R.K. Rastsvetaeva, S.M. Aksenov, I.V. Pekov, M.L.S.C. Chaves, R.P. Richards, D. Atencio, P.R.G. Brandão, R. Scholz, K. Krambrock, R.L. Moreira, F.S. Guimarães, A.W. Romano, A.C. Persiano, L.C.A. De Oliveira and J.D. Ardisson (2015) Almeidaite, $\text{Pb}(\text{Mn},\text{Y})\text{Zn}_2(\text{Ti},\text{Fe}^{3+})_{18}\text{O}_{36}(\text{O},\text{OH})_2$, a new crichtonite-group mineral, from Novo Horizonte, Bahia, Brazil. *Mineral. Mag.*, 79(2), 269-283. (2) (2016) Amer. Mineral., 101, 1012 (abs. ref. 1).