Saltonseaite $K_3NaMn^{2+}Cl_6$

Crystal Data: Hexagonal. *Point Group*: $\bar{3}$. As lozenge-shaped and bladed crystals to ~ 10 cm that are composites of parallel-grown $\{01\bar{1}\,2\}$ rhombohedra.

Physical Properties: *Cleavage*: Very good on {110}. *Tenacity*: Brittle. *Fracture*: Irregular. Hardness = ~ 2.5 D(meas.) = 2.26(1) D(calc.) = 2.297 Astringent taste. Markedly hygroscopic.

Optical Properties: Transparent. *Color*: Colorless; typically appear light orange due to inclusions of akaganéite. *Streak*: White. *Luster*: Vitreous to oily (due to deliquescence).
Optical Class: Uniaxial (+). ω = 1.577(1) ε = 1.578(1)

Cell Data: Space Group: $R\bar{3}\,c$. a = 12.0966(5) c = 13.9555(10) Z = 6

X-ray Powder Pattern: Salton Sea, Imperial County, California, USA.
2.542 (100), 2.851 (68), 2.625 (62), 5.83 (61), 2.689 (32), 1.983 (32), 3.498 (25)

Chemistry:	(1)	(2)
K	28.79	28.75
Na	5.35	5.64
Mn	13.48	13.47
Fe	0.24	
Cl	52.19	52.14
Total	100.05	100.00

(1) Salton Sea, Imperial County, California, USA; average of 5 electron microprobe analyses; corresponds to $K_{3.00}Na_{0.95}Mn^{2+}_{1.00}Fe^{2+}_{0.02}Cl_6$. (2) $K_3NaMn^{2+}Cl_6$.

Occurrence: The product of natural evaporation of geothermal (hydrothermal) brines enriched in K, Na, Mn, and Cl.

Association: Sylvite, halite, akaganéite.

Distribution: From near the southern shoreline, Salton Sea, Imperial County, California, USA.

Name: For the body of water adjacent to where the first specimens were collected.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA (23604) and Museum Victoria, Melbourne, Australia (M51615).

References: (1) Kampf, A.R., S.J. Mills, F. Nestola, M.E. Ciriotti, and A.V. Kasatkin (2013) Saltonseaite, $K_3NaMn^{2+}Cl_6$, the Mn analogue of rinneite from the Salton Sea, California. Amer. Mineral., 98, 231-235.