Crystal Data: Cubic. *Point Group*: 4 3*m*. As cubes to 0.1 mm, in crusts. *Twinning*: Penetration twins on {111} common.

Physical Properties: *Cleavage*: None. *Fracture*: Irregular. *Tenacity*: Brittle. Hardness = 2 D(meas.) = 2.02(3) D(calc.) = 2.038 Gradually turns black on exposure to sunlight.

Optical Properties: Semitransparent. *Color*: Bright greenish blue. *Streak*: Very pale greenish blue. *Luster*: Vitreous. *Optical Class*: Isotropic. n = 1.559(2)

Cell Data: Space Group: $I\bar{4} 3m$. a = 15.441(11) Z = 6

X-ray Powder Pattern: South Rasmussen mine, Soda Springs, Caribou County, Idaho, USA. 7.7881 (100), 11.04 (97), 3.1706 (46), 2.749 (32), 1.8295 (16), 2.3426 (15), 4.487 (14)

Chemistry:	(1)	(2)
Na ₂ O	0.22	
K ₂ O	0.55	
CaO	5.58	6.86
SrO	0.10	
BaO	0.21	
Al_2O_3	3.27	
VO_2	35.85	40.56
P_2O_5	18.78	17.35
H_2O	35.44	35.24
Total	100.00	100.00

(1) South Rasmussen mine, Soda Springs, Caribou County, Idaho, USA; average of 18 electron microprobe analyses supplemented by CHN analyzer; corresponding to $(Ca_{0.75}K_{0.09}Na_{0.05}Ba_{0.01}Sr_{0.01})_{\Sigma=0.91}[(V^{4+}_{3.27}Al_{0.49})_{\Sigma=3.76}P_{2.00}O_{10.23}(OH)_{5.77}]\cdot 12H_2O.$ (2) $Ca[V^{4+}_{4}P_2O_8(OH)_8]\cdot 12H_2O.$

Occurrence: Crystallized at ambient temperatures from late-stage aqueous solutions of near neutral pH under relatively reducing conditions in phosphatic black mudstone.

Association: Quartz, fluorapatite, hydroxylapatite, pyrite, sphalerite, sincosite, native Se.

Distribution: From the South Rasmussen (or South Rasmussen Ridge) phosphate mine, Soda Springs, Caribou County, Idaho, USA.

Name: As the Ca analog of phosphovanadylite, which is now renamed as phosphovanadylite-Ba.

Type Material: Natural History Museum of Los Angeles County, Los Angeles, California, USA. (63578, 63579, 63580, 63581, and 63582).

References: (1) Kampf, A.R., B.P. Nash, and T.A. Loomis (2013) Phosphovanadylite-Ca, $Ca[V^{4+}_4P_2O_8(OH)_8]$ ·12H₂O, the Ca analogue of phosphovanadylite-Ba. Amer. Mineral., 98, 439-443.