

Crystal Data: Triclinic. *Point Group:* $\bar{1}$. As stubby prismatic to platy crystals, commonly wedge-shaped, may have jagged terminations; in aggregates, to 10 cm.

Physical Properties: *Cleavage:* Perfect on {001}. *Hardness* = 6–7 *D*(meas.) = 2.70–2.78 *D*(calc.) = 2.779

Optical Properties: Transparent. *Color:* Colorless to tan or yellowish pink.

Luster: Vitreous.

Optical Class: Biaxial (-). $\alpha = 1.554\text{--}1.558$ $\beta = 1.565$ $\gamma = 1.572\text{--}1.573$
2V(meas.) = 74°–81°

Cell Data: *Space Group:* $C\bar{1}$. $a = 7.8388(9)$ $b = 12.3730(10)$ $c = 6.8082(7)$
 $\alpha = 93.324(8)^\circ$ $\beta = 116.381(9)^\circ$ $\gamma = 92.014(8)^\circ$ $Z = 4$

X-ray Powder Pattern: Duchesne Co., Utah, USA.

3.037 (100), 3.561 (90), 3.076 (90), 3.225 (85), 3.876 (65), 2.841 (55), 6.076 (50)

Chemistry:	(1)	(2)	(3)		(1)	(2)	(3)
SiO ₂	73.13	68.63	73.26	BaO	0.09		
TiO ₂	0.03			Na ₂ O	12.15	10.11	12.59
B ₂ O ₃	14.27	16.80	14.15	K ₂ O	0.03		
Al ₂ O ₃	0.15	0.90		F		0.09	
Fe ₂ O ₃	0.08			H ₂ O	0.08	0.98	
MgO	0.09	2.20		P ₂ O ₅		0.08	
CaO		0.70					
				Total	100.10	100.49	100.00

(1) Duchesne Co., Utah, USA. (2) Dara-i-Pioz massif, Tajikistan. (3) NaBSi₃O₈.

Mineral Group: Feldspar group.

Occurrence: As authigenic crystals along bedding laminations, in brown dolomitic rock and black oil shale from well cuttings (Duchesne Co., Utah, USA); in a pegmatite in an alkalic massif (Dara-i-Pioz massif, Tajikistan).

Association: Eitelite, shortite, nahcolite, searlesite, leucosphenite, aegirine, analcime, magnesio-riebeckite (Duchesne Co., Utah, USA); leucosphenite, eudialyte, stillwellite, pyrochlore, microcline, aegirine, polyolithionite, albite, quartz (Dara-i-Pioz massif, Tajikistan).

Distribution: In the vicinity of the Joseph Smith #1 well, near Duchesne, Duchesne Co., Utah; and at Wind Mountain, Otero Co., New Mexico, USA. In the Dara-i-Pioz massif, Alai Range, Tien Shan, Tajikistan. From the Lovozero massif, Kola Peninsula, Russia.

Name: Honors Frank S. Reed (1894–?) and John L. Mergner (1894–?), petrographic technicians with the U.S. Geological Survey.

Type Material: National Museum of Natural History, Washington, D.C., USA, 106865.

References: (1) Milton, C., E.C.T. Chao, J.M. Axelrod, and F.S. Grimaldi (1960) Reedmergnerite, NaBSi₃O₈, the boron analog of albite, from the Green River Formation, Utah. *Amer. Mineral.*, 45, 188–199. (2) Dusmatov, V.D., N.A. Popova, and L.K. Kabanova (1967) First find of reedmergnerite in the USSR. *Dokl. Acad. Nauk Tadzh. SSR*, 10, 51–53 (in Russian). (3) (1968) *Chem. Abs.*, 71149 (abs. ref. 2). (4) Fleet, M.E. (1992) Tetrahedral-site occupancies in reedmergnerite and synthetic boron albite (NaBSi₃O₈). *Amer. Mineral.*, 77, 76–84. (5) Grew, E.S., M.G. Yates, D.I. Belakovskiy [Belakovskii], R.C. Rouse, S.-C. Su, and N. Marquez (1994) Hyalotekite from reedmergnerite-bearing peralkaline pegmatite, Dara-i-Pioz, Tajikistan, and from Mn skarn, Långban, Sweden: a new look at an old mineral. *Mineral. Mag.*, 58, 285–297.

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