Naquite FeSi

Crystal Data: Cubic. *Point Group*: 23. As irregular grains to 0.1 mm.

Physical Properties: Cleavage: None. Fracture: Conchoidal. Tenacity: Brittle. Hardness = 6.5

D(meas.) = n.d. D(calc.) = 6.186

Optical Properties: Opaque. Color: Steel-gray. Streak: Grayish black. Luster: Metallic.

Optical Class: n.d.

R: (470) 40.6, (546) 42.23, (589) 41.6, (650) 42.5

Cell Data: *Space Group*: $P2_13$. a = 4.486(4) Z = 4

X-ray Powder Pattern: Luobusha mining district, Qusong County, Tibet, China. 2.374 (100), 5.163 (92), 1.851 (79), 1.899 (47), 1.087 (25) 1.774 (16), 1.708 (12)

Chemistry:

	(1)	(2)
Fe	65.65	66.54
Si	32.57	33.46
Al	1.78	
Total	100.00	100.00

(1) Luobusha mining district, Qusong County, Tibet, China; average of 4 electron microprobe analyses; corresponding to $(Fe_{0.994}Al_{0.054})_{\Sigma=1.02}Si_{0.952}$. (2) FeSi.

Occurrence: In the heavy mineral fraction of a podiform chromitite deposit in the peridotite of an ophiolitic harzburgite. Likely the product of a strongly reducing environment and possibly are xenocrysts derived from a mantle source.

Association: Luobusaite.

Distribution: In a heavy mineral fraction from ore body 31, Group II of the Luobusha ("Luobusa") mining district, 200 km southeast of Lhasa, Qusong County, Shannan Prefecture, Tibet, People's Republic of China. From placers and drill-core samples from the Poltava series, Ukraine.

Name: For Naqu (Nagchu) Prefecture, Tibet, near the locality that produced the first samples.

Type Material: Geological Museum of China, Beijing, People's Republic of China (M11798).

References: (1) Li, G., N. Shi, M. Xiong, Z. Ma, W. Bai, and Q. Fang (2012) Naquite, FeSi, a new mineral species from Luobusha, Tibet, western China. Acta Geologica Sinica, 86(3), 553-538. (2) (2014) Amer. Mineral., 99, 1517 (abs. ref. 1).