Crystal Data: Hexagonal. *Point Group:* $\bar{3}\ 2/m$. As aggregates of rhombic crystals, to 0.6 mm; in nodular concretions, commonly compact massive.

Physical Properties: *Cleavage:* Good on $\{10\bar{1}1\}$. *Fracture:* Uneven. Hardness = 4.5–5 D(meas.) = 3.71(1) D(calc.) = 3.748

Optical Properties: Translucent. *Color:* Pale green to bright grass-green, olive-green. *Streak:* Yellow-green. *Luster:* Vitreous to dull.
Optical Class: Uniaxial (–). $\omega = 1.83(1)$ $\epsilon = 1.61(1)$

Cell Data: *Space Group:* $[R\bar{3}c]$ (by analogy to the calcite group). a = 4.608–4.621 c = 14.805–14.93 Z = 6

X-ray Powder Pattern: Gaspé Peninsula, Canada.
2.741 (100), 1.692 (45), 3.543 (36), 2.098 (36), 1.932 (25), 2.317 (20), 1.337 (11)

Chemistry:	(1)	(2)	(3)		(1)	(2)	(3)
CO_2	42.0	[35.9]	43.36	MgO	17.3	2.6	19.85
SiO_2	0.9	0.9		CaO		0.3	
FeO	5.7	0.1		insol.	1.8		
NiO	35.0	55.5	36.79	Total	102.7	[95.3]	100.00

(1) Gaspé Peninsula, Canada; CO_2 by ignition and absorption; after removal of MgO and SiO_2 from serpentine, corresponds to $(Ni_{0.49}Mg_{0.43}Fe_{0.08})_{\Sigma=1.00}CO_3$. (2) Otway prospect, Western Australia; by electron microprobe, here converted to oxides from an original elemental analysis totalling 94.8%, CO_2 calculated for charge balance. (3) $(Ni, Mg)CO_3$ with Ni:Mg = 1:1.

Polymorphism & Series: Forms a series with magnesite.

Mineral Group: Calcite group.

Occurrence: An uncommon secondary mineral in a Ni-sulfide-bearing vein in metamorphosed siliceous dolostone (Gaspé Peninsula, Canada); possibly from alteration of a nickel-rich meteorite (Bon Accord, South Africa).

Association: Millerite, nickeline, annabergite, gersdorffite, polydymite, heazlewoodite, magnesite, spinel, dolomite (Gaspé Peninsula, Canada); pecoraite, magnesite, siderite, chrysotile, antigorite, magnetite, millerite, polydymite (Otway prospect, Western Australia); glaukosphaerite, mcguinnessite, jamborite (Shinshiro, Japan); liebenbergite, trevorite, nickeloan ludwigite, bunsenite, violarite, millerite, nimite (Bon Accord, South Africa).

Distribution: Found in a prospect pit near Mount Albert, Gaspé Peninsula, Quebec, Canada. In Western Australia, from the Otway nickel prospect, near Spinnaway, Nullagine district; in the Otter Shoot gossan, Kambalda, 56 km south of Kalgoorlie; at the Rocky's Reward pit, near Agnew; from the 132 North nickel mine, Widgiemooltha district. Found at Shinshiro, Aichi Prefecture, Japan. In South Africa, on Mabilikwe Hill, Pafuri; from three km west of the Scotia Talc mine, Bon Accord, Barberton district, Transvaal. In the San Benedetto mine, Iglesias district, Sardinia, Italy.

Name: For the original locality on the Gaspé Peninsula, Canada.

Type Material: University of British Columbia, Vancouver, Canada, S-75-4222; National Museum of Natural History, Washington, D.C., USA, 119544.

References: (1) Kohls, D.W. and J.L. Rodda (1966) Gaspeite, (Ni, Mg, Fe)(CO_3), a new carbonate from the Gaspé Peninsula, Quebec. Amer. Mineral., 51, 677–684. (2) Nickel, E.H. (1973) An occurrence of gaspéite and pecoraite in the Nullagine region of Western Australia. Mineral. Mag., 39, 113–115. (3) Pertlik, F. (1986) Structures of hydrothermally synthesized cobalt(II) carbonate and nickel(II) carbonate. Acta Cryst., C40, 4–5.