

Photos of the fly-in/fly-out Voisey's Bay mine (left) and local port/logistical infrastructure



VBN Concentrates

VBN Concentrates are a clean product produced in the north of Canada

- Clean concentrate, with low amounts of deleterious elements.
- Easy to be processed, market standard Cu percentage (27.5–32.5% typical range).
- Sulphur at 31–38% (typical range) allows for a smooth and energy/heat efficient processing.

Typical Analysis

Cu	27.5–32.5%	Co	<0.080%	CaO	<0.10%
Au	0.3–1.5 g/t	Cr	<0.0005%	MgO	<0.200%
Ag	10–70 g/t	F	<0.01%	SiO₂	0.1–0.5%
S	31–38%	Hg	<0.0001%	Te	<0.01%
Fe	31–37%	K	<0.010%	Sn	<0.01%
As	<0.010%	Mo	<0.0030%	Zn	<0.15%
Be	<0.001%	Ni	0.4–0.95%	Se	<0.012%
Bi	<0.010%	P	<0.010%	Al₂O₃	<0.10%
Cd	<0.013%	Pb	<0.05%		
Cl	<0.010%	Sb	<0.0050%		

Vale's VBN Concentrates are produced by Vale Newfoundland and Labrador Limited and sourced from Voisey's Bay Mine.

For more information visit vale.com or contact your regional sales representative.



Carbon intensity is 3.9 t CO₂e/t Cu, including scopes 1, 2, and 3 (upstream) emissions as of the most recent assessment year (2023)¹. Carbon intensity is reassessed on a regular basis.

Disclaimer: The product descriptions and specifications contained in this document are made in accordance with our analyses and the methods used to produce Vale's copper products. While these descriptions and specifications are reflective of normal production lots, rather than each individual cargo, such descriptions and specifications shall in no event be deemed or interpreted as any representation, warranty or commitment by Vale in connection with Vale's copper products quality. Vale's copper products quality shall be determined only in accordance with the corresponding contract terms for each transaction agreed between Vale and Vale's customer and the quality related certificate issued under such contract.

¹Independent third-party limited assurance to the general principles of ISO 14064-3 has been provided by Intertek Health Sciences Inc. Emissions allocated by economic value.

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HS Code

- 26030010 – Copper ore and concentrates

Form

- Clean, industry-leading copper concentrate
- Moisture/humidity level: 6–7%

Logistics

Logistics are affected by seasonality, with limited vessel activity during parts of winter due to environmental regulations.

- Voyage to Europe: ~3 weeks