

Panguna

Porphyry copper (Cu-Au) deposit in North Solomons, Papua New Guinea

Names and other identifiers	
GMRAP ID	553
Alternate names	Bougainville
Tract name	Outer Melanesian Arc I - Papua New Guinea (009pCu7207)
Site status	deposit

Geographic location	
Country	Papua New Guinea
State or province	North Solomons
Geographic location	155.493, -6.318 <i>Political divisions (FIPS codes)</i> Papua New Guinea (country) Southeast Asia (continent) Land (continent)
Geologic map unit	Mainly volcanic terrane, Cenozoic
Nearby data	List Map

Geologic information	
Deposit type	Porphyry copper
Deposit subtype	Cu-Au
Age (Ma)	3.4 Ma
Age determination method	K-Ar
Age range	3.4 ±0.3 Ma
Age reference	Singer and others (2008); Page and McDougall (1972)
Minerals	actinolite, anhydrite/gypsum, apatite, biotite, bornite, chalcocite, chalcopyrite, chlorite, covellite, epidote, galena, gold, hematite/specularite, kaolinite, magnetite, molybdenite, pyrite, rutile, sericite, sphalerite, stannite, tetrahedrite/tennantite, zeolite
Associated rocks	breccia, diorite, feldspar porphyry, granodiorite, basalt, dacite, limestone, andesite, quartz diorite
Tectonic setting	island arc
Stratigraphic age	Pliocene

Commodity and development information	
Development status	Past Producer
Major commodities	Cu
Minor commodities	Pt, Pd
Tonnage (Mt)	1,420 Mt
Cu grade (%)	0.465 %
Mo grade (%)	0.005 %
Au grade (g/t)	0.57 g/t
Ag grade (g/t)	1.1 g/t
Contained copper	6,600,000 t
Gold-Moly ratio	100

Reference information	
Comments	In concentrate: up to 8 ppb Pt, 40 to 52 ppb Pd.
Study area name	Southeast Asia and Melanesia
References	Andrew (1995); Baldwin and others (1978); Clark (1987); Clark (1990); Eastoe (1978); Ford (1978); Fountain (1972); Mining Journal (2009); Page and McDougall (1972); Tarkian and Stribny (1999); Singer and others (2008)
Site reference	Hammarstrom and others (2013)
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