



**EXPLANATION**  
7th LEVEL CROSSCUT

	Scoriaceous amygdaloid		Mineralized fissure showing dip
	Sediment		Vertical mineralized fissure
	Amygdaloidal flow top		Mineralized fissure with much gouge
	Fragmental amygdaloid		Fissure containing copper
	First West lode		Fissure containing chalcocite
	Traces of copper		Closely spaced fractures
			Cross fractures

Note: Geology plotted at floor level. Workings which extend beyond limits of map or would be concealed by superposition are shown by inset maps.

Abbreviations:  
O Ophite  
M Melaphyre  
FM Feldspathic melaphyre  
G Glomeroporphyrite  
D Doleritic (pegmatitic)  
Fr Fragmental  
S Scoriaceous  
C Cellular  
Cc Cellular Coalescing  
Cc Conglomerate  
Ss Sandstone  
Sp Shale

Note: Where symbols are combined, as CFr, first type noted predominates. Abbreviations indicate character of rocks.

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	First West lode		Geologic boundary, dashed where inferred
	Baltic lode and Baltic Back lode		Mineralized fissure, fault, or prominent joint set, showing dip
	No. 3 Conglomerate and sand lenses		Vertical fissure
	Amygdaloid (including scoriaceous amygdaloid)		Fissure containing copper
	Second East lode		Fissure containing mass copper
	Trap		Fissure containing chalcocite
			Closely spaced fractures
			Drift blocked or otherwise inaccessible
			Drift walls concealed

Note: Geology plotted at floor level. Workings which extend beyond limits of map or would be concealed by superposition are shown by inset maps.

See South Half plan (Pls. 22 & 24) for idealized cross section showing sequence of lodes and elevation of levels.

Note: (Trap on footwall side of lode is part of the flow that formed the amygdaloid in which the lode occurs.) Average dip of lodes 69° N 60° W

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Geology plotted at floor level. Workings which extend beyond limits of map or would be concealed by superposition are shown by inset maps.

See South Half plan (Pls. 22 & 24) for idealized cross section showing sequence of lodes and elevation of levels.

**GEOLOGIC PLAN OF ACCESSIBLE PORTIONS OF CHAMPION MINE, HOUGHTON COUNTY, MICHIGAN**  
LOWER LEVELS, NORTH HALF, AND 7TH LEVEL HANGING-WALL CROSSCUT  
COPPER RANGE COMPANY