## DEPARTMENT OF THE INTERIOR UNITED STATES GEOLOGICAL SURVEY

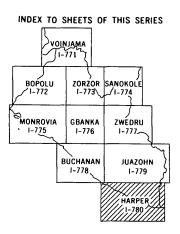
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# GEOLOGIC MAP OF THE HARPER QUADRANGLE, LIBERIA

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M. R. Brock and A. H. Chidester
U.S. Geological Survey
and
M. W. G. Baker
Liberian Geological Survey

### FOLIO OF THE HARPER QUADRANGLE, LIBERIA MAP I-780-D



#### GEOLOGIC MAP SYMBOLS

### COMMONLY USED ON MAPS OF THE UNITED STATES GEOLOGICAL SURVEY (Special symbols are shown in explanation)

	Contact - Dashed where approximately located; short dashed where inferred; dotted where concealed	Strike and dip of beds — Ball indicates top of beds known from sedimentary structures
	Contact — Showing dip; well exposed at triangle	→ Inclined ⊕ Horizontal → Vertical → Overturned
	Fault — Dashed where approximately located; short dashed where inferred; dotted where concealed	Strike and dip of foliation
	Fault, showing dip — Ball and bar on downthrown side	Joseph Searing and plunge of lineation
<del></del>	Normal fault – Hachured on downthrown side	<sup>15</sup> Inclined ◆ Vertical ←→ Horizontal
	Fault — Showing relative horizontal movement	Strike and dip of joints
	Thrust fault - Sawteeth on upper plate	Note: planar symbols (strike and dip of beds, foliation or schistosity, and cleavage) may be combined with linear symbols to record data
	Anticline – Showing direction of plunge; dashed where approximately located; dotted where concealed	observed at same locality by superimposed symbols at point of observation. Coexisting planar symbols are shown intersecting at point of observation.
	Asymmetric anticline - Short arrow indicates steeper limb	
<del></del>	Overturned anticline - Showing direction of dip of limbs	Shafts  Vertical p Inclined
<del></del>	Syncline - Showing direction of plunge; dashed where approximately located; dotted where concealed	Adit, tunnel, or slope  → Accessible → Inaccessible
	Asymmetric syncline — Short arrow indicates steeper limb	x Prospect  Quarry
<del></del>	Overturned syncline - Showing direction of dip of limbs	☆ Active  ☆ Abandoned  Gravel pit
<del></del>	Monocline – Showing direction of plunge of axis	X Active X Abandoned Oil well
-> <sup>20</sup>	Minor anticline - Showing plunge of axis	o Drilling ∲ Shut-in ∲ Dry hole ☆ Gas ॐ Show of gas abandoned
60	Minor syncline - Showing plunge of axis	<ul><li>Oil</li></ul>