DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

OPEN—FILE REPORT
77-574
PLATE 2

SIERRA MADRE

	LITHOLOGY	PRIMARY STRUCTURE	SOURCE	THICKNESS (Meters)
	Major Shear Zone			
	Metalimestone — Interbedded graphite schist, calcareous phyllite			240
	Quartzite (sheared)	small-scale cross-beds	NE	1000
	Fault?			
CYCLE THREE	Quartzite	small-scale cross-beds	ENE	610
	® Quartz-pebble conglomerate — matrix-quartz arenite clasts well-rounded quartz, some pyrite			
	Metalimestone — Interlayered calcareous phyllite with calcite nodules (these are rare!)			
	Paraconglomerate — matrix-phyllitc clasts-pg, rg.			90
CYCLE TWO	Quartzite	small-scale cross-beds, trough cross-beds, channels, coarse-grained quartzite pebble layers	N, NNE	610
	Phyllite			
	Lithic wacke			
	Metavolcanic rocks (pillow lava)			
	Paraconglomerate — matrix phyllitic, clasts rg, pg, q, p, wg		NE	320
CYCLE ONE	Quartzite-phyllite unit — Interlayered fine-grained, slabby quartzite, feldspathic quartzite, quartz pebble conglomerate and phyllite.	channels, small-scale cross-bedding		480
	Lithic wacke — ® pebble conglomerate			330
	Paraconglomerate — two types interlayered — matrix-phyllite clasts-rg, pg, q, p, wg; matrix-arkosic clasts-rg, pg, q, wg	rare cross-beds	NE	180
	Metatuff (?)			
	Garnet schist			480
	Pillow lava			
	Periodotite			
	Quartzite			120
	Metalimestone	stromatolite		60
	Quartzite — locally limey			30
	Archean Basement			

MEDICINE BOW MOUNTAINS
(Deep Lake Formation)

	LITHOLOGY Headquarters Schist of Libby Creek Group	PRIMARY STRUCTURE	SOURCE	THICKNESS (Meters)
	Unconformity			
CYCLE FOUR	Quartzite — Interbedded phyllite some quartz-pebble conglomerate	clay galls, ripple marks, mudcracks ripple marks	ESE	360
	Phyllite — siliceous			
	Metalimestone			
	Parconglomerate — matrix-arkose clasts-wg, q, p, b, vq		ENE	120
CYCLE THREE	Quartzite — Arkosic, abundant pebbles	well-sorted, well-rounded grains, tabular cross-beds	E	330
	Quartzite — Abundant pebbles of black chert and quartz; layers of quartz-pebble conglomerate		ENE	480
	Metalimestone — Siliceous, contains layers of quartz			50
	Paraconglomerate — matrix - subarkose clasts-wg, p, q, b			
CYCLE TWO	Quartzite with interbedded phyllite	trough cross-beds	NE	360
	Quartzite (coarse-grained)	trough cross-beds	N	415
	® Feldspathic conglomerate — matrix-arkose clasts-q, vq, p		ENE	120
	Paraconglomerate — matrix-amphibolite clasts-p, vq, q, b, wg, r			210
	Phyllite			
	Metavolcanic rocks — Amygdaloidal basalt			
CYCLE ONE	Micaceous quartzite	large-scale tabular cross-beds	N	180
	Phyllite and phyllitic quartzite			75
	Fine-grained quartzite			200
	Pebbly quartzite	well-sorted, well-rounded pebbles	ESE	140
	Covered			620
	Quartzite	large-scale tabular cross-beds; climbing ripples; trough cross-beds	N and NW	300
	Covered			120
	Paraconglomerate — matrix-lithic wacke clasts-p, g, vq, r, m			160
	Sheared quartzite Laminated phyllite Talc schist (The above rocks are intensely deformed and their exact stratigraphic position is uncertain)			
	FAULT			
	Archean Basement			

North Shore, Lake Huron, Ontario, Canada
Robertson and Card, 1972; Robertson, 1975, Frarey and Roscoe, 1970

	FORMATION	LITHOLOGY	PRIMARY STRUCTURE	SOURCE	THICKNESS (Meters)
	GOWANDA FORMATION OF HURONIAN SUPERGROUP				
	Unconformity				
QUIRKE LAKE GROUP	Serpent Formation	Quartzite (feldspathic)	cross-beds, ripple marks, mudcracks	NW	340
	Espanola Formation	Metadolomite Graywacke Metalimestone	mudcracks, flame structure, ripple marks	NW	166
	Bruce Formation	Paraconglomerate matrix-siliceous graywacke clasts-wg, g	dropstone clasts, in varvite lenses		60
HOUGH LAKE GROUP	Mississagi Formation	® Quartzite (radioactive arkosic phase)	tabular cross-beds, large-scale ripple marks, some graded bedding	NW	500
	Pecors Formation	Argillite Quartzite Metasiltstone			150
	Ramsay Lake Formation	Paraconglomerate matrix-graywacke clasts-gg, vq, m			
ELLIOT LAKE GROUP	McKim Formation	Argillite			up to 750
	Matinenda Formation	Quartzite Arkose ® Quartz-pebble conglomerate (uraniferous)	trough cross-beds	NW	up to 750
	Thessalon Formation	Amygdaloidal basalt	local pillow basalt and radioactive conglomerate		local
	Livingstone Creek Formation	Subarkose			480
	Archean Basement				

® Radioactive
wg white granite
rg red granite
pg pink granite
gg gray granite
q aquartzite
vq vein quartz
r rhyolite
m mafic igneous rock
b basalt
g greenstone
p phyllite

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This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

PLATE 2.-- TENTATIVE CORRELATION OF MIOGEOSYNCLINAL MIDDLE PRECAMBRIAN ROCKS OF SOUTHEASTERN WYOMING AND CANADA