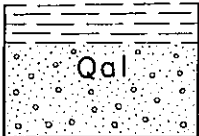
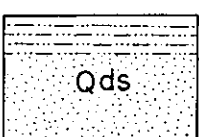
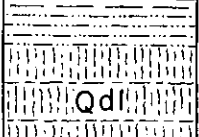

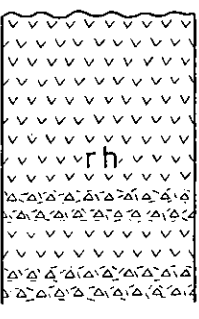


## GEOLOGIC COLUMN AND UNIT DESCRIPTIONS

AGE	ROCK UNIT	LITHOLOGY; THICKNESS WHERE KNOWN	UNIT DESCRIPTION	REFERENCES
CENOZOIC	Alluvium	 <p><i>Sand, gravel, clay and mud; thickness less than 10 m</i></p>	Alluvium, consisting of sand, gravel, clay, and mud, is distributed in river flats and playas; maximum thickness, 10 m.	CHARDIN, P. T. de, 1924, Geology of northern and eastern Mongolia: Geol. Soc. China, v. 3.
	Diluvium	 <p><i>Sand and silt; thickness 5 to 20 m</i></p>	Diluvium, with a total thickness of about 60 m, can be divided into Qds and Qdl. Qds, 5 to 20 m thick, consists of wind-blown sand and silt deposited in lacustrine basins mainly at the end of the Pleistocene. Recently, upon emergence and wind-erosion, the deposit has altered to form the vast desert. The desert sand is blown eastward with the prevailing westerly winds, demolishing pastures.	Geological Institute, South Manchuria Railway Co., 1937, Geological map of Manchuria, scale 1:1,000,000.
		 <p><i>Sandy loess, loess, sand, silt and clay; thickness less than 40 m</i></p>		
	~~~~~Unconformity~~~~~			
	Neogene basalt	 <p><i>Olivine basalt with tuff; maximum thickness more than 100 m</i></p>	Basalt may attain a maximum thickness of more than a hundred meters, consisting of flows and sheets of olivine-basalt with tuff; it may have been deluged from fissures during the Pliocene epoch.	KATAYAMA, Ryōhei, 1914-1917, Reports on the mineral resources in East Mongolia, v. 4 of Survey report on Eastern Inner Mongolia: Temporary Econ. Inv. Bur., Japan Ministry of Agriculture and Commerce.
~~~~~Unconformity~~~~~				SAITŌ, Rinji, compiler, 1940, Geological map of Manchuria and adjacent areas, scale 1:3,000,000: Manchoukuo Geol. Inst.
MESOZOIC	Rhyolite	 <p><i>Rhyolite with pyroclastics; maximum thickness about 1,000 m</i></p>	Rhyolite may attain a maximum thickness about a thousand meters, consisting of flows and sheets of rhyolite with its pyroclastic rocks. It is considered to have been erupted during the Cretaceous period. Cretaceous volcanics constitute the main body of the Ta-hsing-an Ling range that runs west of the map area.	SHIKAMA, Tokio, 1951, The Quaternary period of Manchuria, in Geology and Mineral Resources of the Far East, Manchuria, III-10, Stratigraphy: Comp. Comm. Geology and Mineral Res. Far East, Tokyo Geog. Soc.
	(Column not drawn to scale)			
				YABE, Shigeru, 1924-1925, Geology of the eastern parts of Inner and Outer Mongolia: S. Manchuria Ry. Co. (report for official use only).