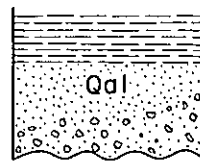
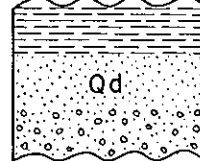


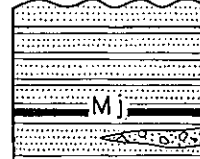
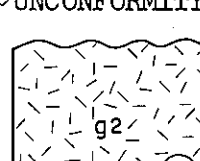
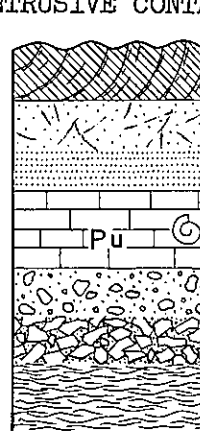


GEOLOGIC COLUMN AND UNIT DESCRIPTION

AGE	ROCK UNIT	LITHOLOGY; THICKNESS WHERE KNOWN	UNIT DESCRIPTION	REFERENCES
QUATERNARY	Alluvium 	Sand, clay and gravel; thickness less than 10 meters	Alluvium, consisting of sand, clay and gravel, is widely distributed in the drainage basins of the Amur River, the Ussuri River and the Urmi River and their tributaries. Regions of alluvial deposits are characterized by vast swampy plains and lakes. The thickness of the Alluvium is less than 10 m.	<p>AHNERT, E. E., 1935, Geologic map of Siberia, scale 1:50,000: Unpub. rept., Geol. Inst., S. Manchuria Ry. Co.</p> <p>KRYSHTOFOVICH, A. N., 1926, Geology: Pac. Russian Sci. Inv.</p> <p>LEONTOVICH, A., PINADA, B., and FECK, A., 1932, Report of the geological expedition in the Khabarovsk district in 1930: U.S.S.R. United Geol. and Prosp. Survey Trans., fasc. 191.</p> <p>MASLENNIKOV, D. F., 1937, The Permian of the Far East: Internat. Geol. Cong., 17th U.S.S.R., 1937, Abs.</p> <p>MONDEN, Shigeyuki, 1936, Survey report of the geology of the route between Ch'i-k'o-te [奇克特] and Fu-yüan [撫遠] along the Amur River: Unpub. rept., Geol. Inst., S. Manchuria Ry. Co.</p> <p>NALIVKIN, D. V., editor, 1955, Geological map of U.S.S.R., scale 1:5,000,000: U.S.S.R. Ministry of Geology.</p> <p>ORUTSCHEN, W. A., 1926, Geologie von Sibirien.</p>
	Diluvium 	Sand, clay and gravel; thickness unknown		
TERTIARY	Neogene(?) basalt 	Andesite, basalt and tuff	The Neogene(?) basalt is found in the vicinity of Zayevka. According to Soviet geologists, the basalt consists of Quaternary andesite, basalt and tuff. Available data are very few.	
	Cretaceous granite 	Granite, granodiorite and quartz diorite	The Cretaceous granite is found in the vicinity of Korfovskoye. It intrudes the Jurassic formation (Mj). According to Soviet geologists, the rock consists of granite, granodiorite and quartz diorite, and the age of intrusion ranges from Jurassic to Lower Cretaceous.	
MESOZOIC	Jurassic formation 	Sandstone, shale, conglomerate and coaly shale; thickness unknown	The Jurassic formation consists of metamorphosed sandstone, shale and conglomerate, accompanied by coaly shale. It occurs in the mountain range of Khekhtsir.	
	Pre-Jurassic granite 	Biotite granite	The pre-Jurassic granite occurring in the vicinity of Fu-yüan [撫遠] is fine-grained biotite granite, intruding the Paleozoic formation (Pu). The rock is hard and compact, and is quarried as building stone.	
PALEOZOIC	Upper Paleozoic formation 	Slate, clay slate, quartzite, sandstone, limestone, conglomerate, breccia, graphite schist and quartz schist; thickness unknown	The Upper Paleozoic formation consists of slightly metamorphosed siliceous slate, clay slate, quartzite, calcareous sandstone, crystalline limestone, conglomerate and breccia, locally associated with graphite schist and quartz schist. According to A. LEONTOVICH (1932), the formation on the eastern bank of the Amur River near Khabarovsk yields fossils of <i>Neoschwagerina</i> , <i>Radiolaria</i> and crinoid stems. Soviet geologists consider the formation a Permian marine deposit. The formation near Fu-yüan consists of an alternation of grayish black siliceous slate and quartzite, and strikes N 20° - 50° E and dips 40° - 80° NW. In the vicinity of K'o-ch'in-mu Shan [科勒木山], the formation is intruded by the pre-Jurassic granite (g2) which has metamorphosed the adjacent siliceous slate into quartz schist. LEONTOVICH assigned the formation near Khabarovsk to Permian, while S. MONDEN (1936) considered it a Lower Paleozoic formation; the age determination is difficult as the rocks yield no fossils and are more or less metamorphosed into schistose rocks.	

(Column not drawn to scale)