	Sys	tem	1 lod	Thick-	Columnar section	Formation arous and description	
		RMARY	Symb	in feet 2/ 0-50	2/	Formation, group, and description Unconsolidated deposits. Includes high altitude	
						gravel and sand (Qg), old beach deposits (Qbb), convium (Qc), wind-deposited silt and sand (Qs), modern beach (Qb), flood plain deposits (Qf lake and swamp deposits (Qls).	1 1 1 1 1
			KJ	1000+		UNCONFORMITY  Undifferentiated Jurassic(?) and Cretaceous rocks Chiefly dark gray thin-bedded to thin-laminated	•
	x	***				rhythmically interbedded graywacke sandstone, sile stone, and mudstone with a few thick to massive be of mudstone showing prominent fracture cleavage (	eds repre-
	s n					sented by oblique lines) and a few thick sandstone Probably several thousand feet thick.	e beds
- 4-1	Ш О					Mearly imperceptible gradation	
	T A C				00000000000000000000000000000000000000		
	<b>ж</b> Ш						
	0				///////	Tiglukpuk(?) formation.  Chiefly dark-gray mudstone with variable amounts of siltstone and very fine to medium-grained gray to brown graywacke. Mudstone is in massive to thin-	of
	N A	ssic(?)				laminated beds. In many places thin-bedded to thi laminated mudstone is rhythmically interbedded wit thin-bedded to thin-laminated siltstone and sandst	th
	c) 01 :	Jurassi	Jt	2500+		A few thick beds of graywacke occur at irregular intervals. Mudstone beds commonly have well-developed closely spaced fracture cleavage and are locally slaty. Although the rocks are generally	
	A SS	and the second	<b>91</b>	2300+		well-cemented with silica they have been intensely deformed and many highly fractured zones are associated with the numerous tight folds and fault	
	U U					Breccia and clayey gouge are common along many of the faults.	
	,						
						Although the basal Tiglukpuk(?) mudstone is common highly sheared, and the contact with underlying rois, in most places, along a fault, the units appear	cks
						to be conformable.  Shublik formation.	
	TRIA	SSIC	Rs	200 <u>±</u>		Thin-bedded brown fossiliferous limestone and cher gray and brown chert, and black shale.  A slight angular unconformity may be inferred from variations in thickness of topmost cherty zone.	
	PERM	IIAN	Ps	400+		Siksikpuk formation. Thin- to medium-bedded green gray argillite, locally with zones containing inte bedded greenish-gray chert, and black shale near b	r-
			MIs	332+		Contact faulted where exposed, but units appear gradational.  Dark-gray calcitic limestone, calcareous silt-	
						stone and shale, and medium-bedded dark-gray chert, and greenish-gray chert and argillite.  Contact faulted where well-exposed, but units	
					A A I'	Zone of brecciated calcitic and dolomitic limestone and chert healed chiefly with	
					7	dolomite, about 400 feet thick. Includes large and small fragments probably derived from underlying Mi, but relationships with	
					T. M. A.	overlying beds suggest the breccia is part of the bedded stratigraphic sequence. Fault - unknown thickness missing.	
						Fault - unknown thickness missing.	
						Unit Ml is generally heterogeneous medium-, thin-, and thick-bedded, locally massive,	
						light-gray to dark-gray dolomitic and calcitic limestone. Fossiliferous beds are rare. Many beds are recrystallized hydroclastic	
			MI <sub>4</sub>	3331+		limestone. Carbonaceous material and non- calcareous clastic detritus are very minor constituents of most of the limestone beds and shaly interbeds are very rare. Light-	
						gray as well as dark-gray chert is common as nodules and regular to irregular bands in and along limestone beds. Chert content varies greatly from bed to bed as well as along beds.	
						Generally may be distinguished from under- lying ML <sub>4</sub> by its irregular bedding, generally	r o u p
						lighter color, its relative abundance of dolomitic beds, and relatively low content of shale interbeds and noncalcareous detrital material.	9
							e .
							n q s ı
	NAIC						
	<u>-</u> РР					Contact gradational, arbitrarily placed at	
	- S S					base of lowermost medium-bedded dolomitic limestone.	
	S						
	<b>-</b>					Unit M1, is chiefly thin bedded, regularly bedded, rhythmically interbedded dark-gray	
•			Ml3	1659		crystalline, partly bioclastic calcitic limestone with variable amounts of grayish- black calcareous silt shale. Nodular lime- stone beds common at some horizons contain	
						variable amounts of dark-gray to black chert.  Dark chert is locally abundant in several zones, chiefly as lenticular nodules and	
		- 1				irregular patches in limestone. The basal 50 feet contains several medium to thick beds of grayish-black siltstone with sparsely scattered pyrite concretions and a few	
						pyritized fossils. The thickness and abundance of intercalated shale generally decreases upward.	
			MI <sub>2</sub>	225		Coarsely bioclastic calcitic limestone. Medium light gray to light olive gray in color. Fossil fragments, chiefly crineid debris, as much as 70 percent of rock locally.  Thin-bedded dark-gray calcitic limestone	
	٢		MII	166		Thin-bedded dark-gray calcitic limestone with interbedded black chert. Black silt shale at top; basal 40 feet sandy.  Contact gradational	
						Sandstone-shale formation (not formally named). Noncalcareous thin-bedded to thin-laminated and shaly fine- to very fine grained medium-gray	
		ppian	Ms	1800+		shaly fine- to very fine grained medium-gray sandstone and sandy siltstone. Carbonized plant fragments occur in much of lower part of unit, marine invertebrate fossils occur in upper 300	
		Mississip				feet. Sandstone is locally quartzitic; fine- grained mica locally abundant on some shaly partings. Some beds of medium- to coarse-grained sandstone and minor amounts of small chert pebble	
		Lower M				conglomerate found in lower part of unit.	
	1.	1	-	F			

<sup>1/</sup> Complete list of symbols for various unconsolidated deposits is given with description to right of columnar section.

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