

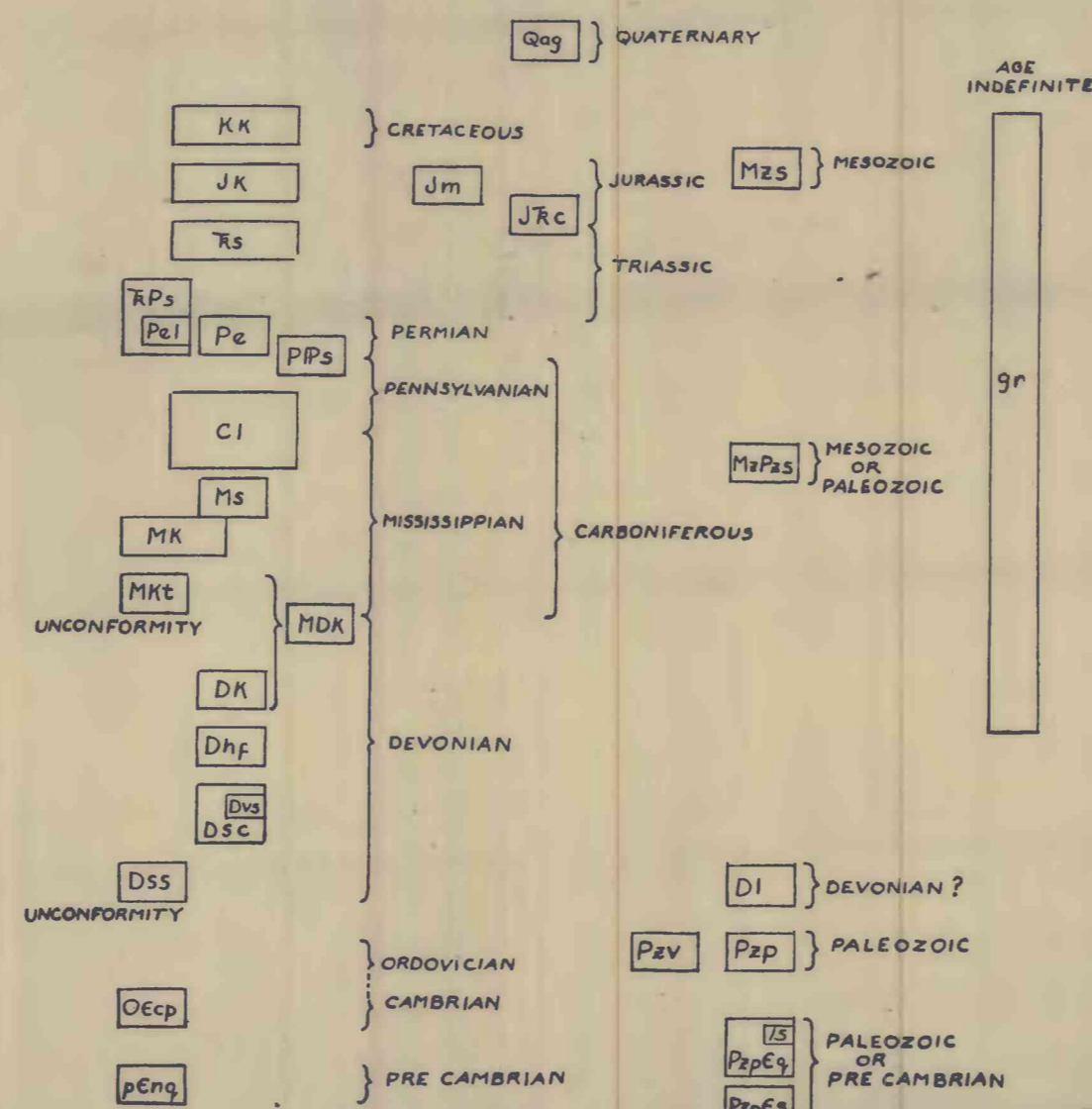
Location of field observation points (dots), 1952-1972, and area mapped in boundary survey (ruled pattern), 1911-1912 (Maddren & Harrington, 1955). Most of quadrangle mapped by interpretation of aerial photographs.

Table 1.--Fossil collections

Locality number	Field collection number	Fossils	Age	Identified by	Geologic map unit	Latitude North deg. min.	Longitude West deg. min.
1	71Abe464	plants	post Silurian	S. H. Mamay	Mk	69 00	143 24
2	71Adt318	brachiopods	Early Permian	J. T. Dutro, Jr.	RPs	68 59	141 26
3	57Abe1	brachiopods	early Late Permian	J. T. Dutro, Jr.	RPs	68 59	141 25
	57Abe3	"	Permian(?)	"	"	"	"
	57Abe1	"	early Late Permian	"	"	"	"
	57Abe2	"	"	"	"	"	"
	57Abe3	"	Early Permian	"	"	"	"
4	71Adt322	pelecypods	Late Jurassic	R. W. Imlay	Jk	68 58	141 28
5	71Adt325A	pelecypods	Jurassic	R. W. Imlay	Jk (too small to map)	68 58	141 27
6	71Adt325	pelecypods	Jurassic	R. W. Imlay	Jk	68 58	141 25
7	71Adt324	pelecypods	Late Triassic	N. J. Silberling	Rs	68 58	141 22
8	71Adt348	brachiopods, trilobites, pelecypods, bryozoans	early Late Permian	J. T. Dutro, Jr.	RPs	68 55	142 55
9	72ARR283	brachiopods	Permian	J. T. Dutro, Jr.	RPs	68 53	143 01
10	72ARR294	foraminifera	Permian	A. K. Armstrong	RPs	68 53	143 30
	60ARR766	brachiopods	Early(?) Permian	J. T. Dutro, Jr.	RPs	"	"
11	71Abe448	foraminifera	Permian?	A. K. Armstrong	Pe1	68 48	142 19
		brachiopods	early Late Permian	J. T. Dutro, Jr.	"	"	"
12	52Abe56	foraminifera	Early Mississippian	A. K. Armstrong	Cl	68 35	143 14
	52Abe60	"	Late Mississippian	"	"	"	"
13	67Abe355C	brachiopods	early(?) Late Mississippian	J. T. Dutro, Jr.	Ms	68 31	141 54
14	63Abe142	brachiopods, crinoids, bryozoa	indeterminate	J. T. Dutro, Jr.	Mk	68 03	143 42
15	63Abe140	pelecypods	Late Triassic	N. J. Silberling	Rs	68 03	143 42
16	63ARR66	cephalopod	late Early or Middle Pennsylvanian	M. Gordon, Jr.	PPs	68 06	143 07
17	63ARR65	snails	Permian	E. L. Yochelson	PPs	68 06	142 59
		brachiopods	"	J. T. Dutro, Jr.	"	"	"
18	63ARR63	snails	Permian	E. L. Yochelson	PPs	68 04	142 57
19	67ARR308	brachiopods	Late Mississippian	J. T. Dutro, Jr.	Cl	68 03	142 39
20	67ARR309	brachiopods	indeterminate	J. T. Dutro, Jr.	Cl	68 04	142 35
21	67ARR310	bryozoans, crinoids	Early or early Late Mississippian	J. T. Dutro, Jr.	Mk	68 07	142 33
22	67ARR642	pelecypods, brachiopods	Triassic	N. J. Silberling	Rs	68 17	141 32
23	67Abe319	foraminifera	Permian	A. K. Armstrong	Rs	68 06	141 24
24	67Abe301	brachiopods	indeterminate	J. T. Dutro, Jr.	Cl	68 01	141 10
25	67Abe297	brachiopods, snails	post Devonian; Mississippian(?)	"	float; Cl or PzPq	68 00	141 21
26	11AK415	pelecypods	Triassic	T. W. Stanton	Rs	68 34	141 03
	11AK416	"	"	"	"	"	"
27	11AK430	pelecypods	Triassic	T. W. Stanton	Rs	68 56	141 17

Many collections of fossils from the Lisburne Group along the International Boundary, made by A. G. Maddren in 1911 and 1912, have been omitted from this list.

CORRELATION OF MAP UNITS

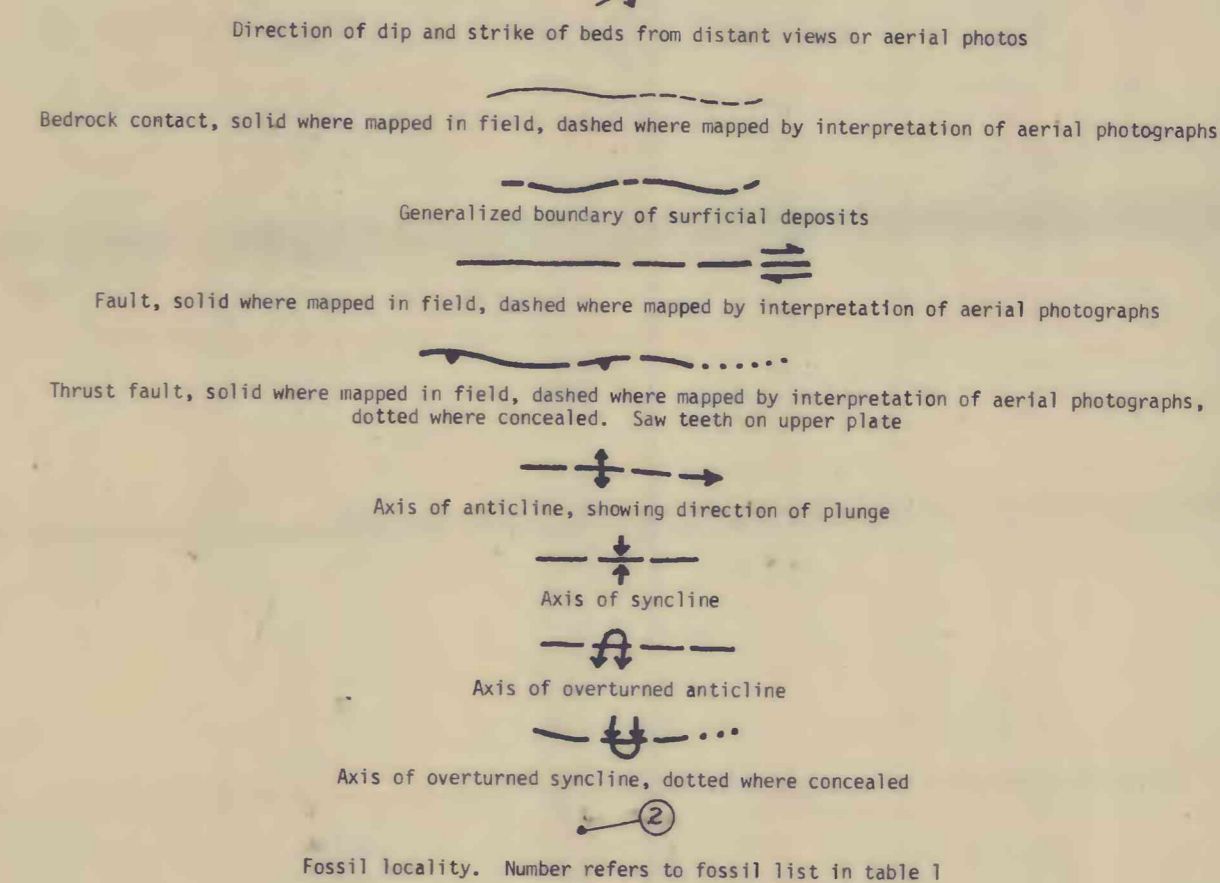


DESCRIPTION OF MAP UNITS

(Mapped area of each unit described may contain small areas of other units)

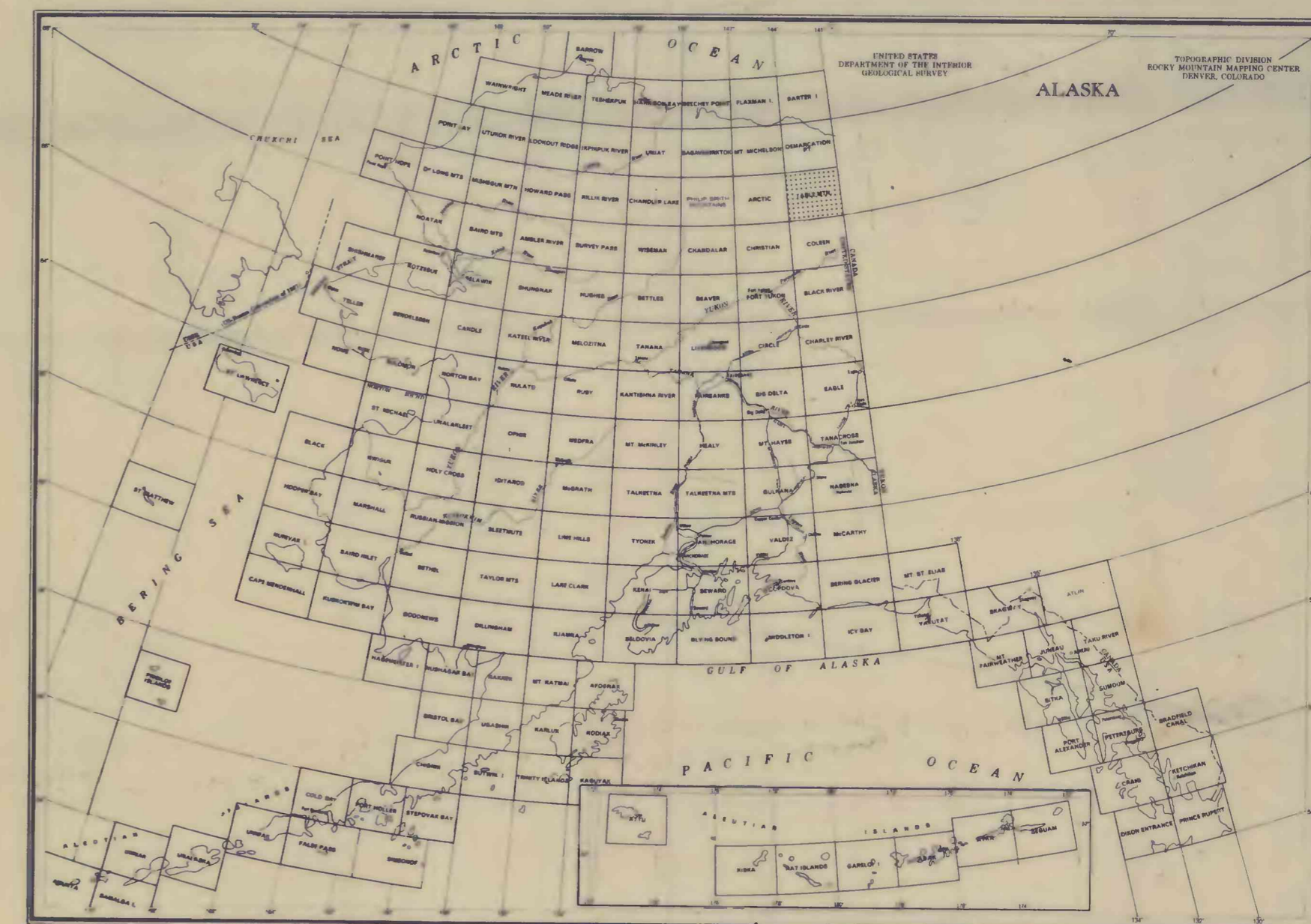
- Qag ALLUVIAL AND GLACIAL DEPOSITS Shown only in larger valleys and where concealed bedrock units cannot be inferred
- Kk KONGAKUT FORMATION (Lower Cretaceous) Dark-gray shale and sandstone
- Jk KINGAK SHALE (Jurassic) Dark-gray to black shale
- Jm MAFIC ROCKS Sills and possibly flows correlative with rocks in Christian quadrangle dated as Jurassic by K/R method (Reiser, Lanphere and Brosge, 1965)
- Jrc CHERT AND SHALE
- Mzs SHALE AND SANDSTONE
- MzPs SLATE AND QUARTZITE
- Rs SHUBLIK FORMATION (Triassic) Black shale and limestone
- RPs SADLERCHIT GROUP (Permian and Triassic) Shale, siltstone and sandstone in upper part (Lower Triassic Ivishak Formation); limestone and brown calcareous siltstone and shale in lower part (Permian Echooka Formation)
- Pe ECHOOKA FORMATION (Permian) Brown calcareous shale, siltstone and sandstone. Shown only where there is no evidence that Ivishak Formation is present. May include some undifferentiated Shublik Formation
- Pe1 LIMESTONE OF ECHOOKA FORMATION Differentiated from rest of Sadlerchit Group where extensive in Mancha Creek and upper Coleen valleys. Occurs also to west and north in Joe Creek and Kongakut valleys
- PPs SHALE AND SILTSTONE Like Echooka Formation, but contains Pennsylvanian as well as Permian fossils. Black shale and brown calcareous shale and siltstone
- Cl LISBURNE GROUP (Mississippian and Pennsylvanian) Gray and brownish-gray limestone and dolomite with nodular chert. Includes Pennsylvanian Nahoo Limestone and Mississippian Alaph Limestone in northern part of quadrangle; Nahoo Limestone not identified in southern part. Includes basal sandstone south of Billwaddy Creek
- Ms SILTSTONE Black, partly calcareous siltstone and silty limestone; nodular chert. Grades up into limestone of Lisburne Group. Contains Mississippian fossils
- Mk KAYAK SHALE (Mississippian) Black shale; thin beds of orange weathering limestone; plant fossils and thin coal partings in north part of quadrangle
- MkC KEKIKTUK CONGLOMERATE (Mississippian) Quartzite and conglomerate; local coal. Generally less than 100 m thick. Rests on sharp angular unconformity. Identified only in northern part of quadrangle
- MDK KANAYUT CONGLOMERATE OR KANAYUT CONGLOMERATE Quartzite and conglomerate, partly ferruginous. Resembles Kanayut Conglomerate in thickness, generally more than 300 m, but in many places overlies an unconformity, as does the Kekiktuk Conglomerate
- Dk KANAYUT CONGLOMERATE (Upper Devonian) Quartzite and conglomerate, partly ferruginous, more than 300 m thick. Beds of red shale in base indicate conformable contact with underlying red shale of Hunt Fork Shale
- Dhf HUNT FORK SHALE (Upper Devonian) Dark-gray shale and sandstone; thin beds of limestone. Red shale locally in upper part
- Dsc SLATE AND CONGLOMERATE Purple, green and brown slate; hematitic, partly calcareous chert-quartz-slate-pebble conglomerate. Correlated with slate, conglomerate and limestone unit (Dsc) of Arctic quadrangle (Brosge and Reiser, 1965)
- Dvs VOLCANIC ROCKS Greenstone in purple and green slate (Dsc)
- Dss SANDSTONE Brown-weathering sandstone and conglomerate; contains Middle(?) Devonian fossils in Demarcation Point quadrangle (Reiser and others, 1974). Rests with angular unconformity on chert and phyllite unit (Dccp), and is overlain unconformably by Kekiktuk Conglomerate
- Dl LIMESTONE
- Pzv VOLCANIC ROCKS Rhyolite, mafic rocks, green tuff(?) and slate, conglomerate. Underlies conglomerate (MDK)
- Pzp PHYLLITE Gray phyllite and greenstone
- Dccp CHERT AND PHYLLITE MEMBER OF NERUOKUK FORMATION
- pEq QUARTZITE AND SEMISCHIST MEMBER OF NERUOKUK FORMATION
- PzPq QUARTZITE
- ls LIMESTONE Lenses in quartzite (PzPq)
- PzPs SCHIST Ferruginous schist, calcareous schist and schistose sandstone
- gr GRANITE AND RHYOLITE Age uncertain. May be Cretaceous near Bear Mountain, where granite and rhyolite intrude Kekiktuk or Kanayut Conglomerate (MDK), and may have altered the Kayak Shale (Mk). May be pre-Mississippian at Amerman Mountain, where hornfels occur in phyllite (Pzp) but not in the overlying Lisburne Group (Cl), similar to the relations of the Old Crow batholith in Coleen quadrangle (Brosge and Reiser, 1969)

EXPLANATION OF MAP SYMBOLS



REFERENCES

- Brosge, W. P., and Reiser, H. N., 1965, Preliminary geologic map of the Arctic quadrangle, Alaska: U.S. Geol. Survey open-file map 256, scale 1:250,000.
- 1969, Preliminary geologic map of the Coleen quadrangle, Alaska: U.S. Geol. Survey open-file map 370, scale 1:250,000.
- Maddren, A. G., and Harrington, G. L., 1955, Geologic maps of the area along the Alaska-Canada boundary between the Porcupine River and Arctic Ocean: U.S. Geol. Survey open-file rept. 118.
- Reiser, H. N., Lanphere, M. A., and Brosge, W. P., 1965, Jurassic age of a mafic igneous complex, Christian quadrangle, Alaska: U.S. Geol. Survey Prof. Paper 525-C, p. C68-C71.
- Reiser, H. N., Brosge, W. P., Dutro, J. T., Jr., and Detterman, R. L., 1974, Preliminary geologic map of the Demarcation Point quadrangle, Alaska: U.S. Geol. Survey Misc. Field Studies Map MF-610, scale 1:200,000.
- Yeend, Warren, and Brosge, W. P., 1973, Preliminary geologic map of a prospective transportation route from Prudhoe Bay, Alaska, to Canadian border, part IV, Arctic and Table Mtn. quadrangles: U.S. Geol. Survey Misc. Field Studies Map MF-522, scale 1:125,000.



INDEX SHOWING QUADRANGLE LOCATION

RECONNAISSANCE GEOLOGIC MAP OF THE TABLE MOUNTAIN QUADRANGLE, ALASKA

BY

W.P. BROSGE, H.N. REISER, J.T. DUTRO, JR. AND R.L. DETTERMAN

1976

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