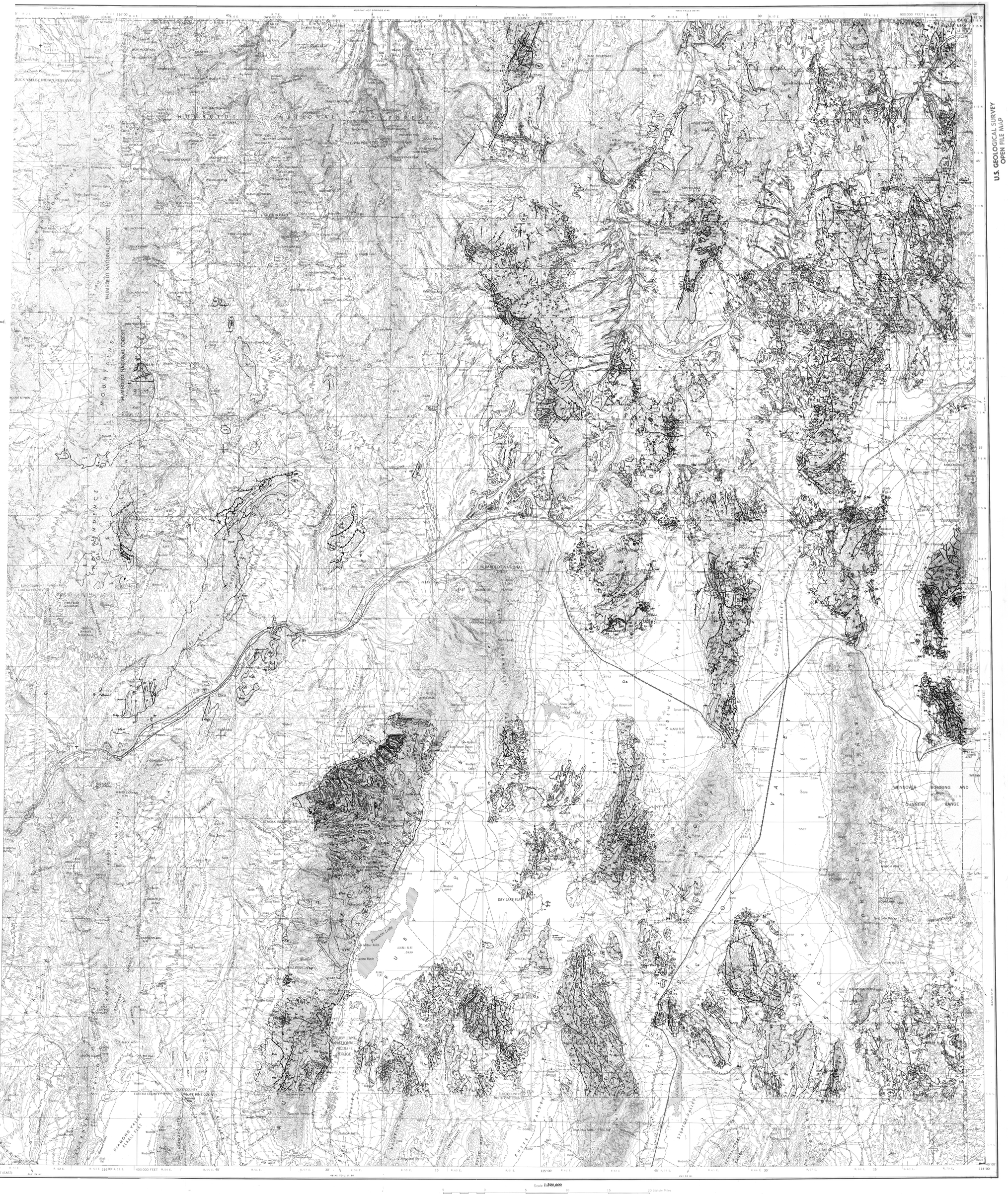


EXPLANATION

Quaternary	Qa, unconsolidated surficial deposits

Sedimentary and Volcanic Rocks

Tertiary	Ta, tuffaceous sandstone, ash, and fresh-water limestone Tv, undifferentiated flows and tuffs
Jurassic and Triassic	JT , sandstone, conglomerate, and shale
Triassic	℞ , limestone, conglomerate, and shale
Permian and Triassic	℞ P, greenstone, shale, and limestone (northern Adobe Range).
Permian	P, undifferentiated strata Pgz, Gerster and Phosphoria formations (northeastern part of map) Pmp, Meade Peak formation (northeastern part of map) Pgdr, Grandeur formation (northeastern part of map) Phl, bioclastic limestone (northeastern part of map) Ppc, Park City group Pp, Pequop formation Prh, Rib Hill formation Pr, Rib Hill and Riepe Spring formations undivided (Cherry Creek Mountains
Pennsylvanian and Permian	IPPrs, Riepe Spring formation (Spruce Mountain and Valley Mountain) IPP, undifferentiated strata
Pennsylvanian	IP, limestone and dolomite (southeastern corner of map) IPe, Ely limestone IPeu, upper member of Ely limestone (Spruce Mountain) IPel, lower member of Ely limestone (Spruce Mountain)
Mississippian	Mdp, Diamond Peak formation Mc, Chainman Shale Mdpc, Diamond Peak and Chainman undivided M, sandstone, siltstone and limestone (Overshy's area)

WESTERN FACIES		EASTERN FACIES	
Ordovician, Silurian, Devonian, and Mississippian(?)	WF, bedded chert, shale, argillite, siltstone, sandstone, and limestone, with some volcanic rocks	Mississippian	Mj, Joana limestone
		Devonian and Mississippian	MDp, Pilot Shale
		Devonian	Dg, Guilmette formation Dsi, Simonson dolomite D, undifferentiated strata
		Devonian and Silurian	DS, Roberts Mountains formation (Independence Mountains)
		Silurian	S, Roberts Mountains formation (Snake Mountains)
		Ordovician Silurian, and Devonian	OSD undifferentiated strata predominantly dolomite
		Ordovician and Silurian	OS undifferentiated strata predominantly dolomite
		Ordovician	O, Hanson Creek formation (Snake Mountains) Oe, Eureka quartzite Op, Pogonip limestone (includes Eureka quartzite where not mapped separately)
		Cambrian	Є, undifferentiated limestone, dolomite, and shale Єpm, Prospect Mountain quartzite
		Precambrian	pЄ, McCoy Creek group (Pilot Range)

Metamorphic Rocks

(Ruby Mountains, East Humboldt Range, Wood Hills and Pequop Mountains)

Dg', metamorphosed Devonian limestone
OSD', metamorphosed Ordovician, Silurian, and Devonian dolomite
Єo', metamorphosed Cambrian and Ordovician limestone
Єpm', metamorphosed Prospect Mountain quartzite
gn, gneiss (northern Ruby Mountains)

Intrusive Rocks

Tertiary	Thp, granodiorite of Harrison Pass (Ruby Mountains)
Cretaceous	Kgr, granite (Ruby Mountains)
Jurassic	Jgr, granite (Ruby Mountains) Jgd, granodiorite (Toana Range and around Contact)
	pg, pegmatitic granite (Ruby Mountains)
	i, various intrusive rocks of unknown age

Lithologic contact; dashed where location is less certain

High-angle fault; dashed where location and (or) existence is less certain; bar and ball on apparent downthrown side; dotted where buried

Low-angle fault; dashed where location and (or) existence is less certain; teeth on upper plate

Axial trace of anticline showing direction of plunge

Axial trace of syncline showing direction of plunge

Overturned anticline

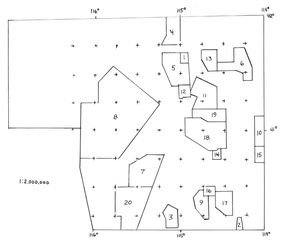
Overturned syncline

Strike and dip of strata

Vertical strata

Overturned strata

Strike and dip of foliation



INDEX TO GEOLOGIC MAPPING USED IN THE COMPILATION OF THE EASTERN ELKO COUNTY MAP

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Scale 1:200,000

5 0 5 10 15 20 Statute Miles

5 0 5 10 15 20 25 30 Kilometers

PRELIMINARY GEOLOGIC MAP OF ELKO COUNTY, NEVADA

By
Roger A. Hope
1970

Base from Army Map Service 1:250,000 series: McDermitt, 1955; Wells, 1961; Winnemucca, 1962; and Elko, 1965.

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

U.S. GEOLOGICAL SURVEY
OPEN FILE MAP