

DESCRIPTION OF MAP UNITS

Qal ALLUVIUM (QUATERNARY)—Unconsolidated sediments along streams and dry washes (MOSTLY TERTIARY)—Sand and gravel, minor volcanic ash, lava flows, and limestone; includes some Quaternary colluvium and includes poorly exposed, coarse, red-weathering loosely cemented conglomerate in the northwestern part of the mapped area that may be as old as Cretaceous

Tsv TRIPASS LIMESTONE (LOWER MISSISSIPPIAN)—Limestone, dolomite, thick-bedded, sporadic chert nodules and lenses; rich in large productid brachiopods and very large silicified pelecypods

Ps PERMIAN—Phosphatic quartz siltstone, chert, chert arenite, chert pebble conglomerate, quartz-sandy and chert-pebbly dolomite, some of it rich in silicified brachiopods; chert composed of spicules whose axial canals are filled with phosphate; thin phosphorite beds, especially abundant near top of unit; abundant crossbedding and scoured surfaces and abundant chalcidonic blebs and chickenwire structures probably indicative of the former presence of evaporites

Pp PENNSYLVANIAN—Limestone, dolomite, and chert-quartzite conglomerate that are overlain by a sequence of major dolomite, cherty dolomite, quartz- and chert-sandy and chert-pebbly dolomite, and minor detrital beds similar to those comprising most of the overlying unit; most beds in upper part of unit are phosphatic; Upper Pennsylvanian fusulines in lower limestone part of unit

PMdp MISSISSIPPIAN—Limestone, dolomite, and chert-quartzite conglomerate that are overlain by a sequence of major dolomite, cherty dolomite, quartz- and chert-sandy and chert-pebbly dolomite, and minor detrital beds similar to those comprising most of the overlying unit; most beds in upper part of unit are phosphatic; Upper Pennsylvanian fusulines in lower limestone part of unit

Ms MISSISSIPPIAN—Limestone, dolomite, and chert-quartzite conglomerate that are overlain by a sequence of major dolomite, cherty dolomite, quartz- and chert-sandy and chert-pebbly dolomite, and minor detrital beds similar to those comprising most of the overlying unit; most beds in upper part of unit are phosphatic; Upper Pennsylvanian fusulines in lower limestone part of unit

ALLOCHTHONOUS ROCKS

Ps SHALE AND LIMESTONE (LOWER TRIASSIC)—Shale, olive drab, thin, and limestone thinly laminated, fine-grained, lithically similar to dated Lower Triassic allochthonous rocks of the neighboring Adobe Range

Ps SILICEOUS DETRITAL ROCKS AND BEDDED CHERT (PERMIAN)—Major chert-quartz arenite with rounded quartz and angular chert fragments, chert-quartzite pebble conglomerate, and bedded dark chert; minor amounts of siltstone, dolomite, phosphorite, and light-gray phosphatic spicule chert; detrital beds are intensely brecciated and the bedded dark chert is highly contorted; altogether this is the most intensely deformed and brecciated unit in the Peko Hills area

PMdp DIAMOND PEAK FORMATION (LOWER PENNSYLVANIAN AND MISSISSIPPIAN)—Coarse-chert quartzite conglomerate, minor chert-quartz sandstone, a single bed of limestone with Upper Mississippian conodonts

Ms QUARTZ-CHERT ARENITE (LOWER MISSISSIPPIAN)—Sandstone, coarse-grained, interbedded with poorly exposed shale; a single bouldery dolomite; probably correlates with sandstone assigned to the Mississippian Chairman Shale in Coal Mine Canyon, Adobe Range (Ketner, 1970, 1973) and with the so-called Diamond Peak Formation of Oversby (1972) in the Windermere Hills where it overlies the Tripass Limestone with a gradational contact

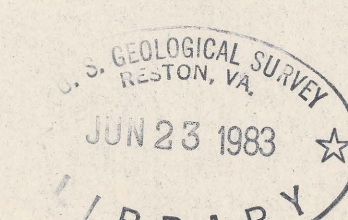
REFERENCES

- Ketner, K. B., 1970, Geology and mineral potential of the Adobe Range, Elko Hills, and adjacent areas, Elko County, Nevada: U.S. Geological Survey Professional Paper 700-R, p. 109-108.
- , 1973, Preliminary geologic map of the Coal Mine Basin quadrangle, Elko County, Nevada: U.S. Geological Survey Miscellaneous Field Studies Map, MF-525, scale 1:25,000.
- Ketner, K. B., and Smith, J. Fred, Jr., 1974, Folds and overthrusts of Late Jurassic or Early Cretaceous age in northern Nevada: U.S. Geological Survey Journal of Research, p. 417-419.
- Oversby, Brian, 1972, Thrust sequences in the Windermere Hills, northeastern Elko County, Nevada: Geological Society of America Bulletin, v. 83, p. 2677-2688.
- , 1975, New Mississippian formation in northeastern Nevada and its possible significance: American Association of Petroleum Geologists Bulletin, v. 57, p. 1779-1783.



PRELIMINARY GEOLOGIC MAP OF THE PEKO HILLS, ELKO COUNTY, NEVADA

By
Keith B. Ketner and James G. Evans
1983



M20572
R290
C.1

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

open file report

M20572
R290
C.1