OPEN-FILE REPORT 83-393

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

SCALE 1:24000

CONTOUR INTERVAL 40 FEET
DASHED LINES REPRESENT 10 FOOT CONTOURS
DATUM IS MEAN SEA LEVEL

Geology mapped 1978-81

QUADRANGLE LOCATION

KYLE HOT SPRINGS, NEV.
PERSHING CO.

CORRELATION OF MAP UNITS

Qa, Qs	Holocene	QUATERNARY
Ql, Qb, Qo	Pleistocene	QUATERNARY
d		TRIASSIC? TO TERTIARY
PMha, PMhs		PERMIAN, PENNSYLVANIAN, AND MISSISSIPPIAN
Miu, Mil, Mill		MISSISSIPPIAN
Ov, Ovq, Ova, Ovg		ORDOCICIAN ORDOVICIAN ORDOVICIAN
O€l		ORDOVICIAN AND CAMBRIAN

DESCRIPTION OF MAP UNITS

Qa ALLUVIAL DEPOSITS (Holocene)--Fluvial gravel, sand and silt.

Qs HOT SPRING DEPOSITS (Holocene)--Mainly travertine, but locally siliceous sinter

LAKE LAHONTAN DEPOSITS (Pleistocene)

Ql LAKE SILT AND SAND

Qb BAR, SPIT, AND BEACH DEPOSITS--Mainly gravel and sand

Qo OLDER ALLUVIAL DEPOSITS (Pleistocene)--Principally fanglomerate, but also includes fluvial gravel deposited during main period of fan building and some younger deposits of alluvium and colluvium

d DIABASE (Triassic? to Tertiary)--Finely crystalline, olive brown to dark gray diabase composed mainly of plagioclase and pyroxene

HAVALLAH SEQUENCE (Permian, Pennsylvanian, and Mississippian)

PMha ARGILLITE-CHERT UNIT-- Interbedded yellowish-gray to medium-gray argillite and siliceous argillite, light-gray and greenish-gray chert, and minor greenstone

PMhs SILTSTONE-QUARTZITE UNIT--Pale-red to dark-gray siltstone and argillite; fine- to medium-grained, poorly sorted quartzite; and conglomerate containing subangular granules and pebbles of chert and minor quartz in a fine-grained matrix of quartz and chert grains

INSKIP FORMATION (Mississippian)

Miu UPPER MEMBER--Micaceous quartzite, quartz wacke, quartz-mica schist, phyllite, recrystallized chert, minor limestone, and some mafic metavolcanic rocks

Mil LOWER MEMBER--Conglomerate, micaceous quartzite, quartz wacke, quartz-mica schist, phyllite, and minor limestone. Grains of quartz and quartzite 1 to 5 mm across compose 10 to 25 percent of many beds of quartzite, wacke, and schist

Mill Basal limestone--Thin bedded to very thick bedded, commonly crinoidal limestone and marble

VALMY FORMATION (Ordovician)

Ov VALMY FORMATION, UNDIFFERENTIATED--Quartzite, argillite, chert, and greenstone in both depositional and fault contact

Ovq QUARTZITE UNIT--Massive, vitreous, fine- to medium-grained quartzite

Ova ARGILLITE-CHERT UNIT--Dark-gray argillite and chert with some interlayered greenstone and minor limestone and quartzite

Ovg GREENSTONE UNIT--Greenish-gray altered mafic volcanic rocks

O€l LIMESTONE, ARGILLITE, CHERT, AND GREENSTONE (Ordovician and Cambrian)--Predominantly limestone and dark-gray argillite, with some interbedded chert and local interlayered greenstone

Contact--dashed where approximately located

Normal fault--dashed where approximately located; dotted where concealed. Ball and bar on downthrown side

Thrust fault or low-angle fault--dashed where approximately located; dotted where concealed. Sawteeth on upper plate

Overturned thrust fault--dashed where approximately located; dotted where concealed. Sawteeth in direction of dip; bars on tectonically higher plate

Faults within and bordering the Valmy Formation--not distinguished as either normal or thrust

Highest shoreline of Lake Lahontan

Minor syncline--showing plunge of axis

Minor fold axis-- showing plunge of axis

Strike and dip of beds

Inclined

Vertical

Horizontal

Overturned

Strike and dip of foliation

Strike and dip of foliation and parallel overturned bedding

Shaft

Adit

Trench

Prospect pit

Open pit

PRELIMINARY GEOLOGIC MAP OF THE KYLE HOT SPRINGS 7.5-MINUTE QUADRANGLE, PERSHING COUNTY, NEVADA

by

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1983