TEI
826

TEI-826

GEOLOGIC MAP OF THE PAIUTE
RIDGE QUADRANGLE, NYE AND
LINCOLN COUNTIES, NEVADA

By F. M. Byers, Jr., and Harley Barnes

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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GEOLOGIC MAP OF THE PAIUTE RIDGE QUADRANGLE, NYE
AND LINCOLN COUNTIES, NEVADA*

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By F. M. Byers, Jr., and Harley Barnes

June 1964

Report TEI-826

This report is preliminary and
has not been edited for conformity
with Geological Survey format.

*Prepared on behalf of the U.S. Atomic Energy Commission.

UNITED STATES
DEPARTMENT OF THE INTERIOR
Geological Survey
Washington 25, D.C.

May 22, 1964

Mr. James E. Reeves, Manager
Nevada Operations Office
U.S. Atomic Energy Commission
P. O. Box 1676
Las Vegas, Nevada

Dear Mr. Reeves:

Transmitted herewith, are two copies of TEI-826, "Geologic map of the Paiute Ridge Quadrangle, Nye and Lincoln Counties, Nevada," by F. M. Byers, Jr., and Harley Barnes, June 1964.

We plan to release this map to the public in the open files.

Sincerely yours,

W.S. Twardofof

for V. R. Wilmarth
Assistant Chief Geologist
Office of Engineering Geology

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U.S. ATOMIC ENERGY COMMISSION

Q6	OLIVINE UNMELTED SAND and gravel in modern washes.
Q7	EOLIAN DEPOSITS--includes windblown sand in modern stable and mobile dunes.
Q8	TALUS and other COLLUVIUM--very coarse bouldery gravel to fine gravel
Q9	LANDSLIDE DEBRIS--poorly sorted bouldery gravel.
Q10	OLDER ALLUVIAL GRAVEL--coarsened with caliche in upper few feet of basal fill.
Q11	BASALT--fine to medium grained, 10-20 cm. basalts, similar zone at base.
Q12	CLASTIC BASALTIC ROCKS--principally microgabbro and some basalt consisting of labradorite, augite, and iddingsite after olivine; occurs as basalt dikes and microgabbro plinglike intrusions with marginal zone.
Q13	SPONGEAGG--a differentiation of the microgabbro; occurs as small pods
Q14	FRANKLIN SANDSTONE AND SILTSTONE (400-ft.)--yellowish to very light gray, laminated to thin-bedded, includes two white beds of vitric sandstone to foot wall. Includes some conglomeratic tuffaceous top and in southern part of quadrangle.
Q15	PIGMENTED TUFF--
Tpaf	TUFF OF AMMONIA TONS (0-160 ft.)--compound cooling unit of moderate yellowish brown partially welded to nonwelded ash-flow tuff; developed pincer (finger) pattern of welded and nonwelded tuff; contains phenocrysts of feldspar and biopyramidal quartz as much as 3 mm in diameter, rare black glass, and some small angular clasts of brownish, somewhat coarse craggy outcrops. Includes white ash-fall tuff at base.
Ter	TERMINAL SAND MEMBER (0-200 ft.)--multiple-flow compound cooling unit, in descending order, brown densely welded vitrophyric biotite ash-flow tuff, pinkish gray to white nonwelded ash-flow tuff, and includes ash-fall tuff between this unit and Topikal Spring Member.
Tp	TOPICAL SPRING MEMBER--multiple-flow compound cooling unit, includes welded differentiated ash-flow tuff, light gray to the north in white bedded tuff.
Tp1a	ALTERED TUFF OF AMMONIA TONS AND INDIAN TUFF FORMATIONS--red oxidized and fused tuff adjacent to basaltic intrusive rocks.
Tp2	INDIAN TUFF FORMATION--includes welded and nonwelded ash-flow tuff, undivided (0.2, 100 ft.)--nonwelded ash-flow(?) tuff and ash-fall tuff locally reworked by wind and water, bedded tuff in

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Legend:

- Qal, sand and gravel; includes a few areas of older alluvium.
- Qoa, older alluvium
- Qe, alluvial deposits
- Qc, Talus and other colluvium
- Qls, Landslide debris
- Qtb, Basalt flow
- Qt, Intrusive basaltic rocks
Qtag, syenogabbro
- Qts, Friable sandstone and siltstone
- Tpa*, Tuff of Ammonia Tanks
- Tpr, Rainer Mesa Member
- Tpia, Altered tuff of Piapi Canyon and Indian Trail Formations
- UNCONFORMITY
- FAULT AND SUBSEQUENT TERTIARY

Scale: 0 1/4 1/2 3/4 1 mile