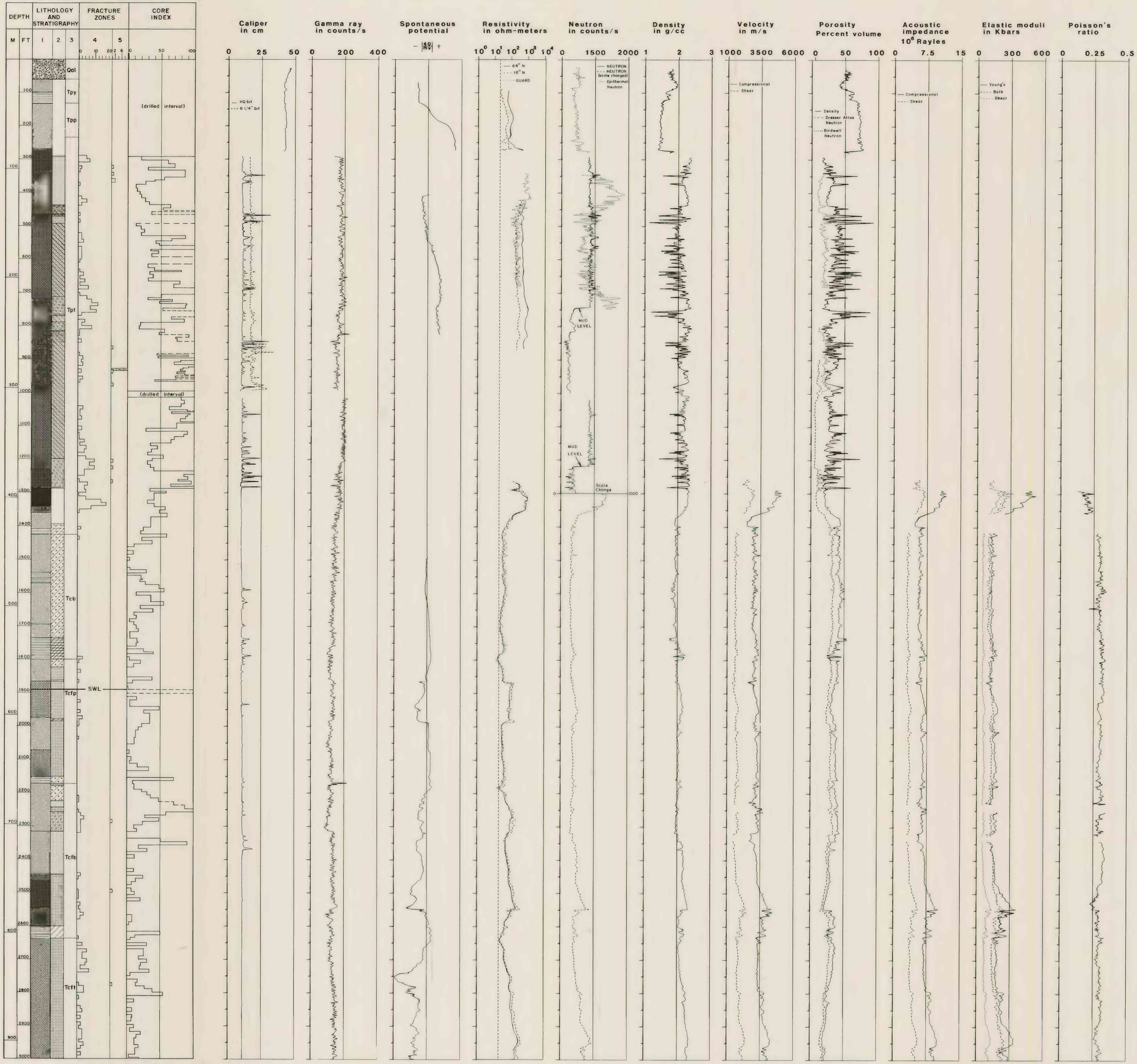
Open-File Report 83-321
Plate 1

DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

Prepared on behalf of the
U.S. Department of Energy



Geology from Spengler and others, 1981

EXPLANATION

LITHOLOGY AND STRATIGRAPHY

(1) Welded, breccia, and bedded zones

densely welded; moderately welded; non- to partially welded; vitrophyre; bedded; flow breccia; alluvium

(2) Crystallized and altered zones

vitric; vapor phase; devitrified; sparse / abundant lithophysal (devitrified); devitrified or vapor phase (slightly zeolitized); devitrified or vapor phase (slightly silicified); devitrified (slightly argillic); zeolitized; zeolitized (slightly argillic); zeolitized and argillic (contains pyrite); zeolitized and silicified upper - slightly lower - moderately

(3) Stratigraphic units

- Alluvium ..... Qal
- Paintbrush Tuff
  - Yucca Mountain Member ..... Tpy
  - Pah Canyon Member ..... Tpp
  - Topopah Spring Member ..... Tpt
  - Tuffaceous beds of Calico Hills ..... Tcb
- Crater Flat Tuff
  - Prow Pass Member ..... Tcfp
  - Bullfrog Member ..... Tcfb
  - Tram unit (informal) ..... Tcft
- Flow breccia ..... Tfb
- Lithic-rich tuff ..... Trt
- Older ash-flow and bedded tuff ..... Tt
  - Unit A; Unit B; Unit C

FRACTURE ZONES

(4) Joints

0 10

Number of measured joint planes per 10-foot interval

(5) Shear fractures

0 6

Number of fracture planes per 10-foot interval along which differential movement was recognized

Fault zones
(5 feet or greater in thickness)

CORE INDEX

$$\text{Core index} = \frac{(\text{ft broken}) + (\text{ft core loss}) + (\frac{1}{2}\ \text{joints})}{(\text{drilled interval, ft})} \times 100$$

Indicates core indices resulting from mechanical difficulties during coring

SWL — Approximate static water level

Lithology, Stratigraphy, and Geophysical Logs, 0-915 Meters, From Drill Hole USW G-1, Nevada Test Site, Nevada