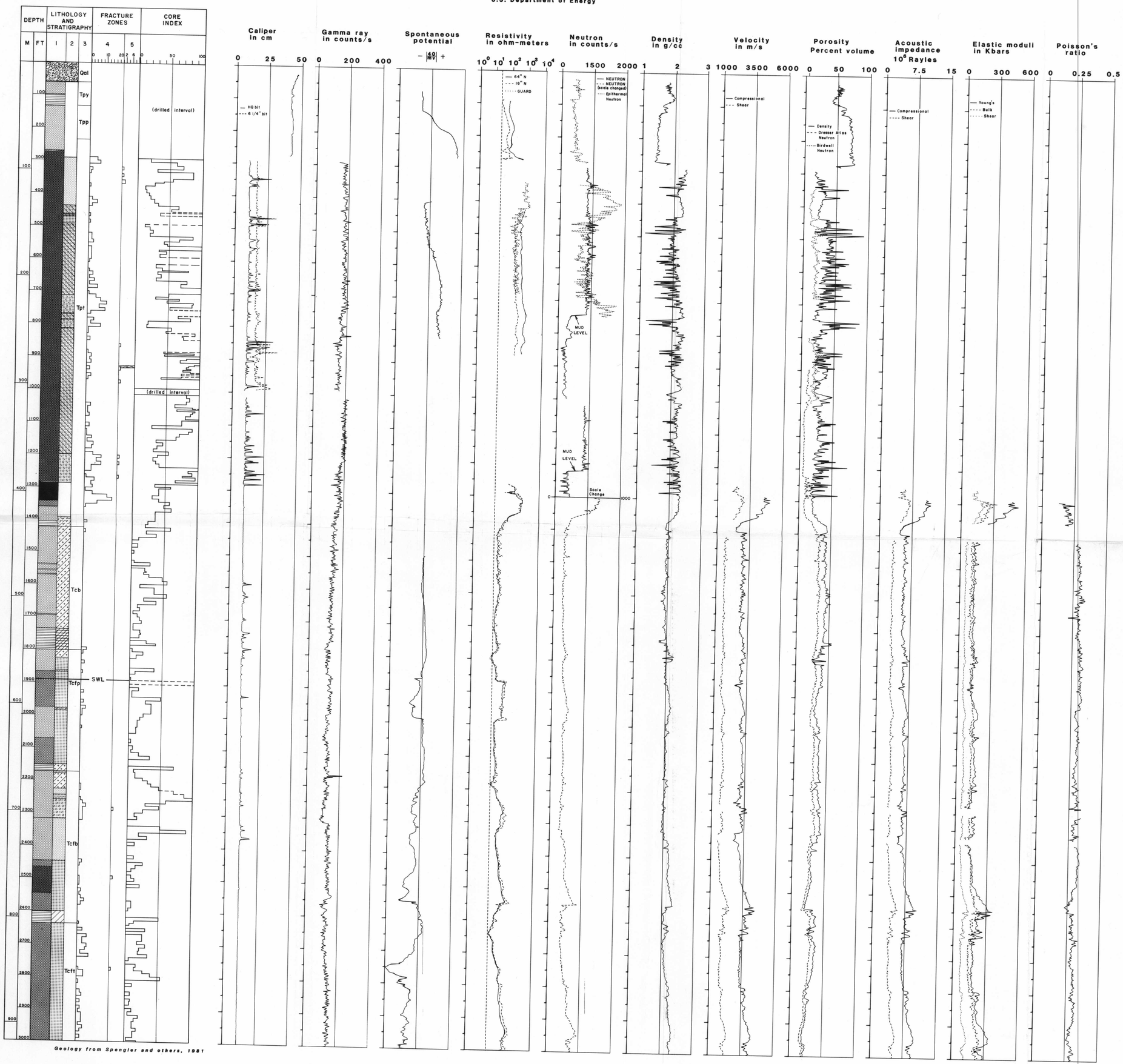
DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

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

Open-File Report 83-321
Plate 1



Geology from Spengler and others, 1981

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

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 ..... Trf
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

$$\text{Core index} = \frac{\text{(ft broken)} + \text{(ft core loss)} + (\tfrac{1}{5}\ \text{joints})}{\text{(drilled interval, ft)}} \times 100$$

– – – – – – Indicates core indices resulting from mechanical difficulties during coring

SWL — Approximate static water level

D-02