

FIG. 6. Results for talc (cf. caption to Fig. 3).

is between 0.5 and 1 kb. The behaviour of graphite is remarkable for the following anomalies when compared with the other materials:

1. It compacts during deformation at all pressures but to a *lesser* degree at higher pressures; this is presumably related to the large degree of compaction under pressure alone.
2. During pressure release and the accompanying volume expansion, after 20 per cent deformation, the original length is almost completely recovered as well as the original volume, that is, the shape recovered too so that to the eye the specimens appeared undeformed. Also a large part of the recovery occurred below 0.5 kb.

Sodium chloride

Two specimens were deformed at each of the confining pressures 0.25, 0.5, 1, 2, 6 and 8 kb. Within the scatter indicated, no effect of pressure on the stress-strain curve was detected [Fig. 8(a)]. There was a small volume decrease, in excess of elastic change, during deformation at each pressure [Fig. 8(c)]; again, within the scatter of results, no clear difference at different confining pressures was detected although there was tendency for the volume decreases to be smaller at higher pressures. The latter effect is probably real, corresponding to the greater degree of elimination of porosity at higher pressures during

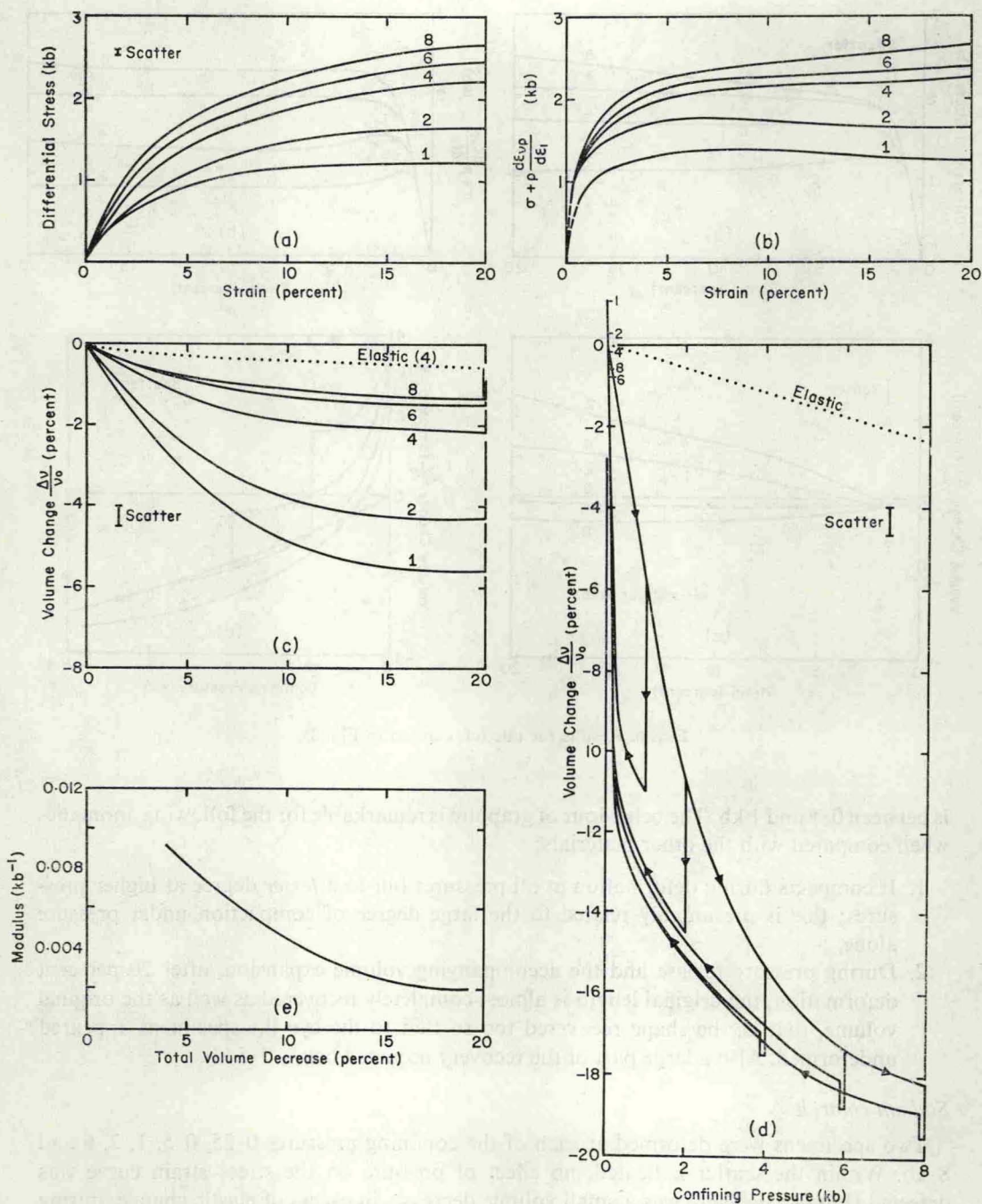


FIG. 7. Results for graphite [cf. caption to Fig. 3 for (a)–(d); (e) values of elastic modulus used in calculating elastic volume change correction for (b)].