switching circuit were employed to attain maximum sensitivity. Further details of this system are described elsewhere.[6]

## RESULTS AND DISCUSSION

A typical creep curve for the high temperature creep of indium is shown in Fig. 4. Measurements were taken in the quasi-linear or steady-state region, which occurred between strains of 1.5% and 6 or 7% for the specimens studied. Fig. 5 shows part of a creep curve obtained from a pressure cycling test. The apparent activation volumes obtained from pressure cycling are shown in Fig. 6 for a typical run. The apparent activation volumes for eleven single crystal indium specimens are shown in Table I and the individual volumes for specimen 5 are given in Table II. The average value for the eleven specimens is $12.0 cm^3$/mole with a standard deviation of $\pm 0.9 cm^3$/mole. This correponds to $.76\Omega$ ($\Omega = 15.7 cm^3$/mole).

Corrections to the apparent activation volume were not made since the pressure derivatives of G and $D_0$ have not been determined. In general G should exhibit a positive pressure derivative and in non-cubic metals $D_0$ has been found to increase with pressure[7] so the magnitude of the correction term may be somewhat minimized. For the pressures used the activation volume does not appear to be pressure dependent; however, knowledge of the pressure dependence of G and $D_0$ is