Curve B (Fig. 1) was obtained under the same experimental conditions as here, except that the pyrophyllite tetrahedrons, completely assembled, were dried at 90° C for 2 h after the iron oxide was applied5. In addition to this substantial increase in efficiency, the deformation of the sample was reduced. Results obtained following this procedure were reproducible to about 1 or 2 per cent. It should be observed that the points on curve B can be connected by a nearly straight line which does not pass through the origin. Preliminary experiments indicate that sample porosity may reduce the efficiency of pressure transmission by 5-10 per cent.

The pressure-transmitting qualities of pyrophyllite can also be improved by heating the tetrahedrons to 650° C for several hours before the samples are assembled. This treatment causes the pyrophyllite to be about 10 per cent more efficient in pressure transmission. However, this procedure apparently reduces the elasticity of the pyrophyllite, because frequent blow-outs were

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Applied Research General Dynamics, Fort Worth, Texas.

Hall, H. T., Rev. Sci. Instr., 29, 267 (1958).
 Bridgman, P. W., Proc. Amer. Acad. Arts and Sci., 81, 165 (1952).
 Kennedy, G. C., and LaMori, P. N., Progress in Very High Pressure Research, 304 (John Wiley and Sons, Inc., New York, 1961).
 Lloyd, R. C., Hitter, H. Q. and Johnson, D. P. J. Progress, Name of Parts and Progress of the Progress of th

Lloyd, E. C., Hutton, U. O., and Johnson, D. P., J. Res. Nat. Bur. Stand., 63, C, 59 (1959).
Hall, H. T. (personal communication).