

# Pipeline Response to Buried Explosive Detonations

Volume II

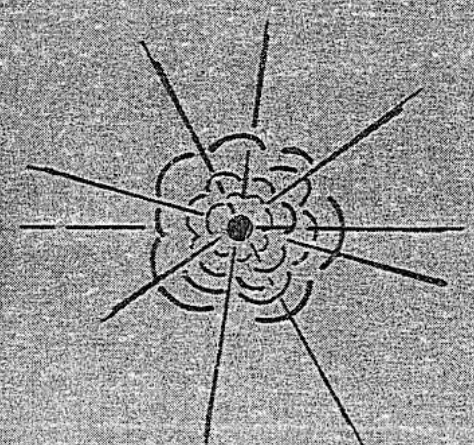
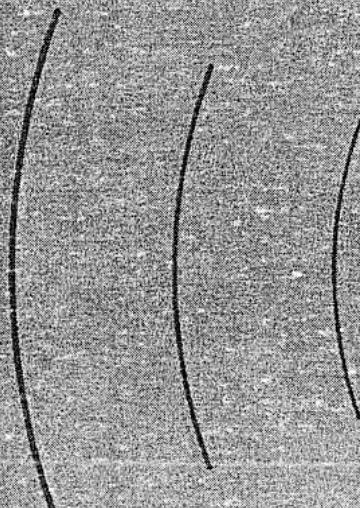
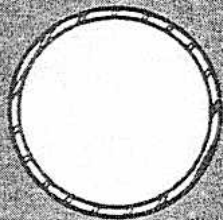
By Edward D. Esparza • Peter S. Westine • Alex B. Wenzel

For The Pipeline Research Committee



August 1981

U.S. Bureau Of Mines Library  
Twin Cities Research Center  
5629 Minnehaha Avenue South  
Minneapolis, MN 55417-3099



SOUTHWEST RESEARCH INSTITUTE  
San Antonio

Houston

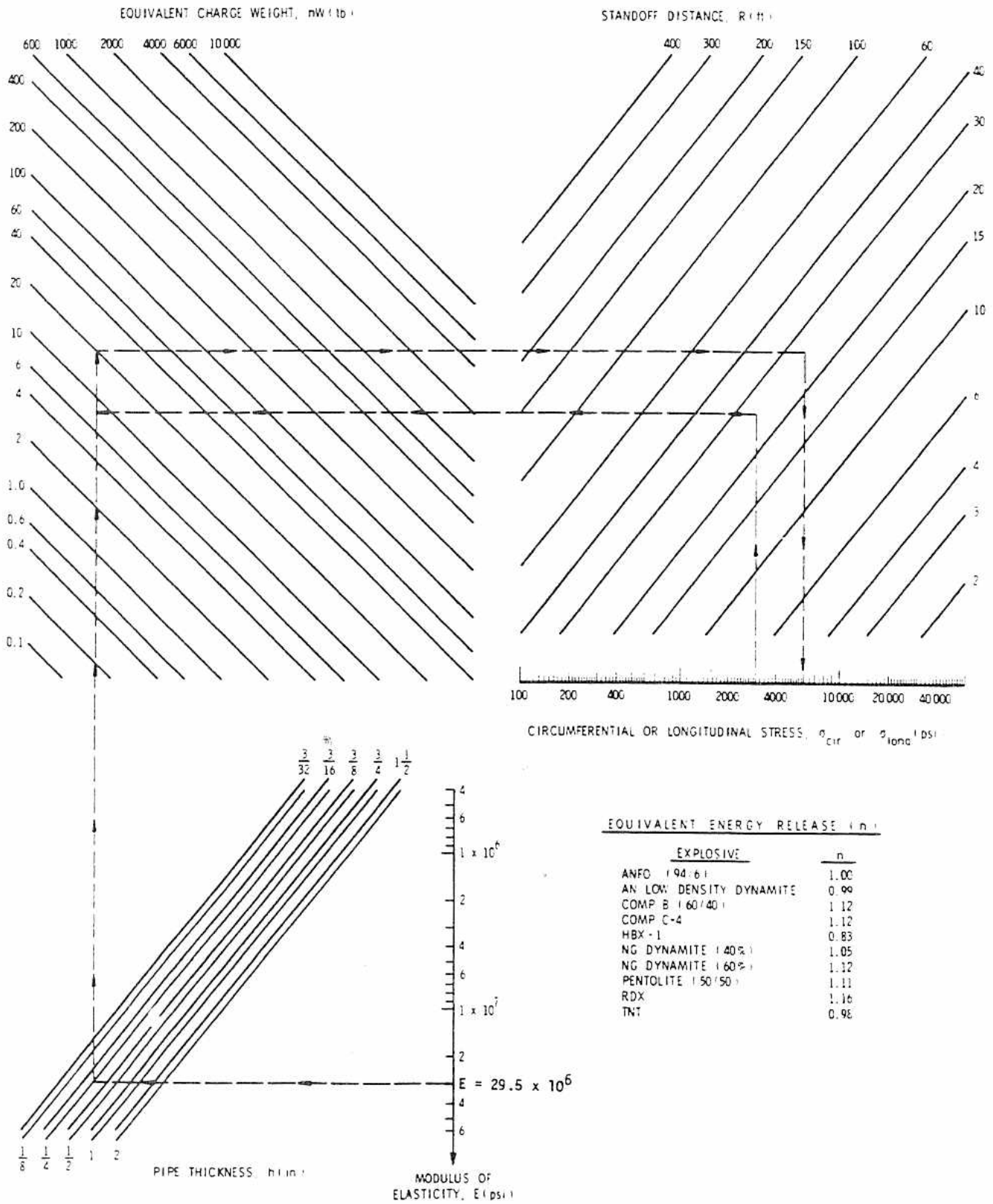


Figure 80. Pipe Stress Nomograph for Point Sources

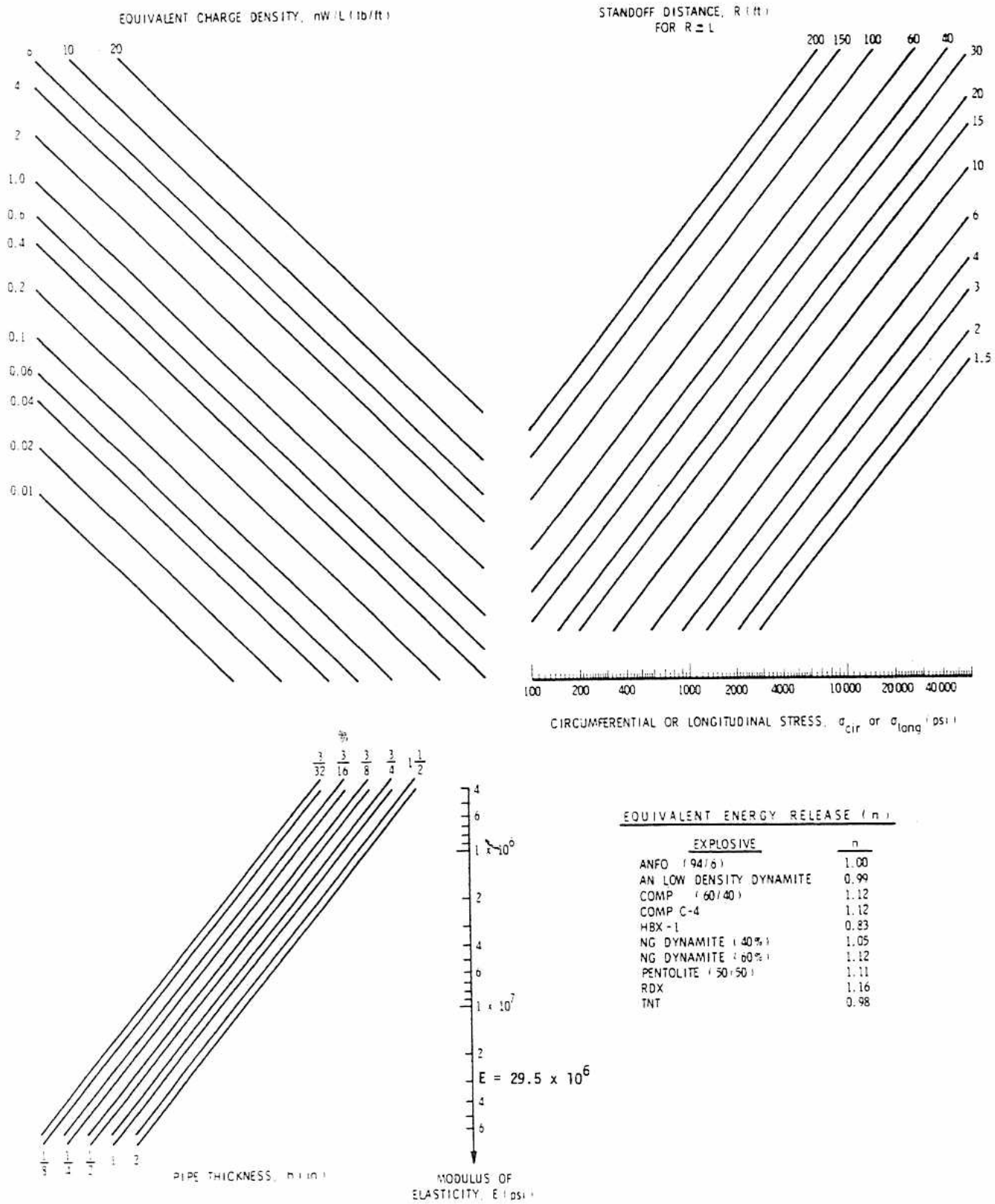


Figure 81. Pipe Stress Nomograph for Parallel Line Sources