



STANFORD EXPLORATION PROJECT

Report No. 13

October 1977

By

D. Brown, J. Claerbout, R. Clayton,  
B. Engquist, W. Gray, J. Newkirk,  
A. Snyder, D. Tjøstheim

Stanford University  
Stanford, California

## CONTENTS

|   | Page |
|---|------|
| <i>CLAERBOUT, J. F.</i> , Parsimonious Deconvolution .....  | 1    |
| <i>CLAERBOUT, J. F.</i> , Examples of Parsimonious Deconvolution .....  | 10   |
| <i>BROWN, D.</i> , Approximation Schemes for 15-Degree Equations with Variable Velocity .....   | 33   |
| <i>BROWN, D.</i> , One-Way Wave Equations by Factorization into Pseudo-Differential Operators for the Variable Coefficient Case ..... | 41   |
| <i>SNYDER, A.</i> , Bright Spots .....  | 47   |
| <i>GRAY, W.</i> , Velocity Estimation from a Single Reflector .....   | 69   |
| <i>GRAY, W.</i> , Variable Velocity Anti-Aliasing Window For Slant Stacking .....   | 84   |
| <i>BROWN, D.</i> , and <i>R. CLAYTON</i> , Difference Approximations for Forward Modelling Problems .....                             | 90   |
| <i>ENGQUIST, B.</i> , Variable Velocity: Wave Extrapolation and Reflection .....  | 109  |
| <i>TJØSTHEIM, D.</i> , Figure Corrections to "Autoregressive Modelling and Spectral Estimation..." (SEP-11) .....                     | 117  |
| <i>NEWKIRK, J.</i> , Installing an Array Processor: A Progress Report .....   | 121  |
| Research Personnel .....  | 122  |