AN INTERPRETATION OF SEISMIC CROSS SECTIONS IN THE VALLEY AND RIDGE OF EASTERN TENNESSEE Robert C. Milici, Leonard D. Harris, and Anthony T. Statler 1979 STATE OF TENNESSEE **DEPARTMENT OF CONSERVATION DIVISION OF GEOLOGY OIL AND GAS CHART 6** SHEET 2 OF 2 Final Report For Seismic Work Accomplished Under U.S. Department of Energy Contract No. EY-76-C-05-5196 Morgantown Energy Technology Center Morgantown, WV 26505 In Part Supported By A Grant From U.S. Geological Survey, Branch of Oil and Gas Resources FORELAND THRUST STRUCTURAL PROVINCE K-1 SOUTH DEPTHPOINTS 101 - 454 DEPTH SECTION POWELL VALLEY ANTICLINE FIELD DATA

PARTY
OURCE

PARTY DIGITAL PROCESSING

DIT AND TRUE AMPLITUDE RECOVERY

SPIERICAL DIVERGENCE AND EXPONENTIATION

TIME 10.3 SEC.

TIME -VARIANT DECONVOLUTION

FULTE LENGTH. E. 152 MSEC.

TIME -VARIANT SCALING EASTERN LOW ANGLE THRUST STRUCTURAL PROVINCE LINE TC-1
DEPTHPOINTS 101 - 1568 DEPTH SECTION EQUALIZATION
DIP FILTER
TIME - VARIANT DIGITAL FILTERING
22 - 48 HZ AT 500 MEE:
14 - 35 HZ AT 4000 MEE:
14 - 35 HZ AT 4000 MEE: EASTERN LOW ANGLE THRUST STRUCTURAL PROVINCE IMBRICATE THRUST STRUCTURAL PROVINCE LINE TC-2 EASTERN LOW ANGLE THRUST STRUCTURAL PROVINCE Figure 5. Seismic cross section TC-2. Seismic columnar sections are shown on fig. 2. Conodont alteration indices (CAI) are inferred from Epstein and others (1977) and Harris and Milici (1977). See Table 1 for explanation of units. INTERIOR—GEOLOGICAL SURVEY, RESTON, VA.—1979—011442