East

USGS

LINE YMP-3
YUCCA MOUNTAIN

MIGRATION
DEPTH SECTION

FIELD PARAMETERS

RECORDED BY: NORTHERN GEOPHYSICAL
RECORDED FOR: U.S.G.S.
INSTRUMENT: I/O SYSTEM TWO
NOTCH FILTER: OUT
RECORD LENGTH: 8 SEC

CREW: 110
DATE: NOV. 1994
FIELD FILTERS: 3/12 - 135/190 HZ/DB
TAPE FORMAT: SEG-D
SAMPLE RATE: 2 MS

SPREAD
1 <— 19717.5 —> 240 241 <82.5> SP <82.5> 242 <— 19717.5 —> 481
PROGRESSION

SOURCE INFORMATION
SOURCE TYPE 1: DYNAMITE(DEEP HOLE)
SP INTERVAL: 330 FT
HOLE DEPTH: 200 FT
CHARGE SIZE: 200 LB

SOURCE TYPE 2: VIBROSEIS
SWEEP FREQUENCY: 10-50 HZ
SWEEP LENGTH: 12 SECONDS

SOURCE TYPE 3: POULTER
CHARGE SIZE: 40 LBS
CHARGE SPREAD: 82.5 FT

SOURCE TYPE 4: MINIHOLE
CHARGE SIZE: 2 LB / HOLE
CHARGE SPREAD: 5 HOLES OVER 182.5 FT

CABLE INFORMATION
GP INTERVAL: 82.5 FT
NO. OF TRACES: 481
ELEMENTS/TR: 24

PROCESSING SEQUENCE

1. REFORMAT
   SEG-D TO PROMAX
2. GEOMETRY DEFINITION
   TRACE EDIT
3. STATICS
   WEATHERING STATICS REMOVED
   DATUM STATICS REMOVED
   PROC DATUM = FLOATING
   VE = 3000 FT/SEC
4. 2D-FILTER
   APPLY NMO
   2D-FILTER
   UNAPPLY NMO

5/8. VELOCITY ANALYSIS
   CONTINUOUS VELOCITY STACKS

6/9. NMO CORRECTION & MUTE
   50 % STRETCH MUTE

7/10. RESIDUAL STATICS
   SURFACE CONSISTENT
   WINDOW 0.5 - 2.3 SEC
   PREFILT 5/10-35/50 HZ

11. SCALING
   500 MS SLIDING GATE

12. DATUM CORRECTION
   FINAL DATUM = 3000 FT

13. CDP STACK

14. FILTER
   BAND PASS
   5-10-40-60 HZ

15. SCALING
   500 MS SLIDING GATE

16. FX DECONVOLUTION

17. STOLT MIGRATION
   SMOOTHED STACKING VELOCITIES
   70 PERCENT

18. DEPTH CONVERSION
   SMOOTHED STACKING VELOCITIES
   80 PERCENT

PROCESSED BY
TEXSEIS, INC.
HOUSTON, TEXAS

DISPLAY PARAMETERS

Tue Sep 26 15:34:28 1995
Traces/Inches = 50
Bias Percent = 0
Gain Set = 0.45
Gain Constant = 3445.7
Static Shift = 0
Inches/Second = 0.5
Clip Limit = 4
RMS Amplitude = 0.290216

U.S. Geological Survey Open-File Report 96-28
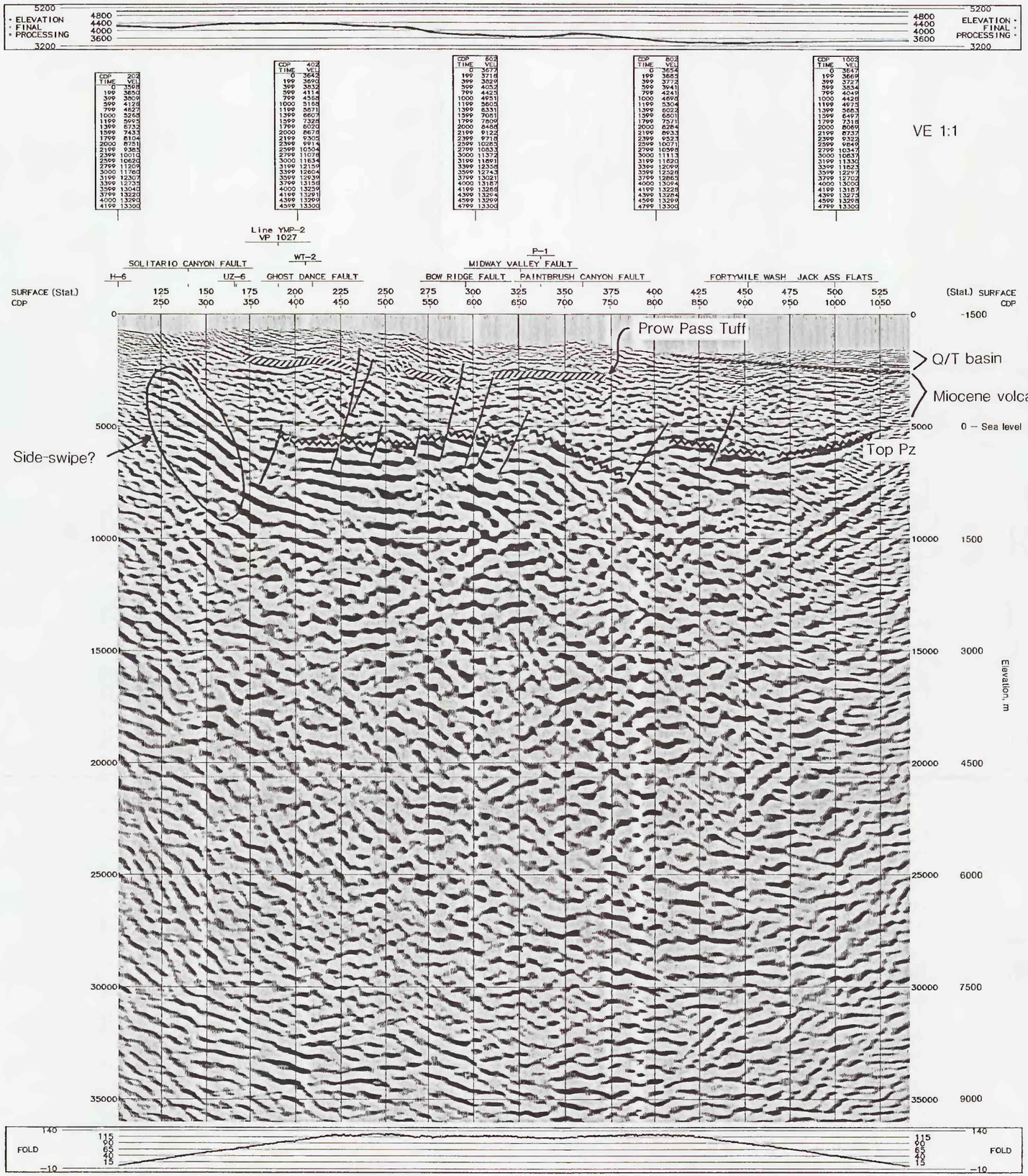
Figure 17. Final migrated, depth-converted section for Line 3, interpreted. The processing used to generate this section is described in the text and Table 10. 40 stations (80 CDPs) equal one km.