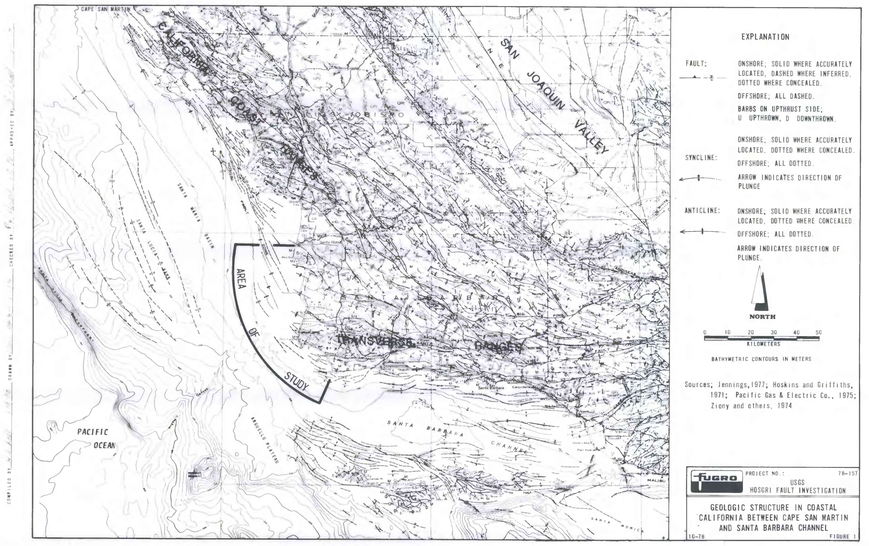
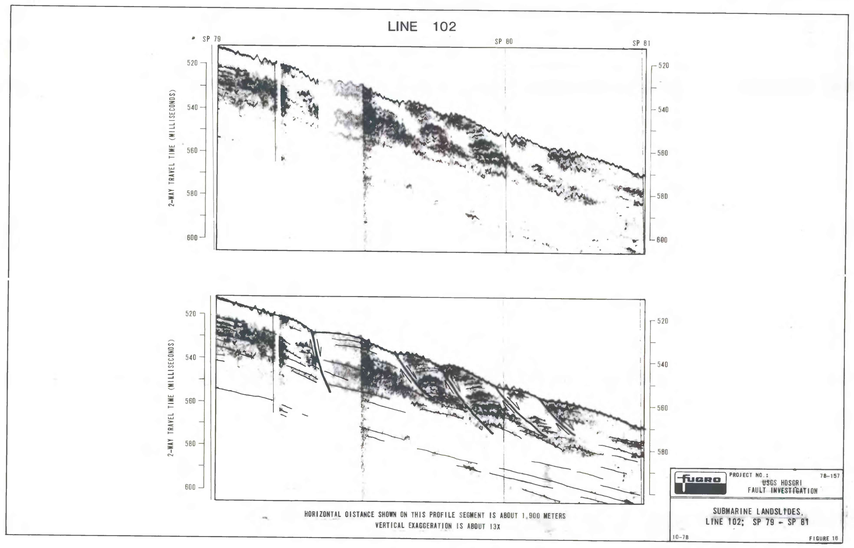
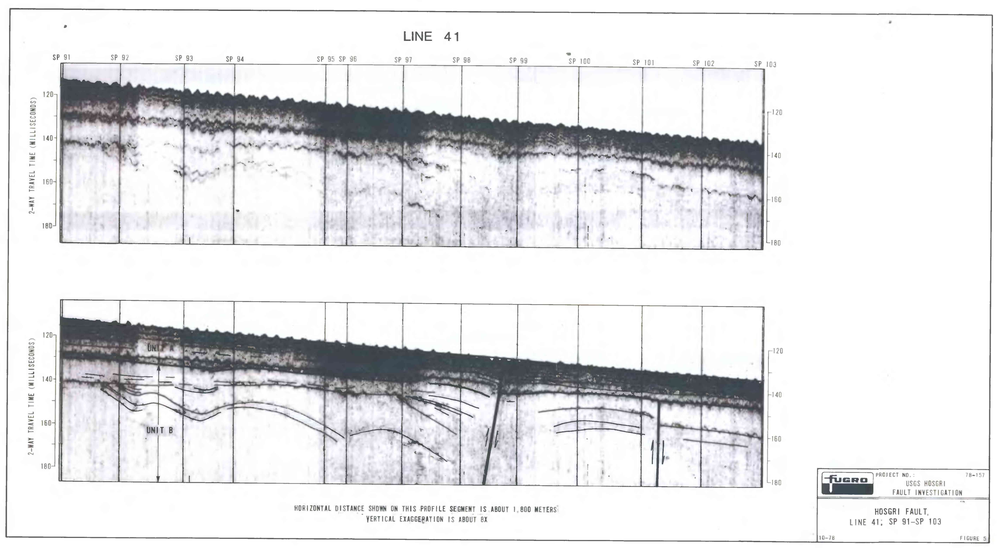
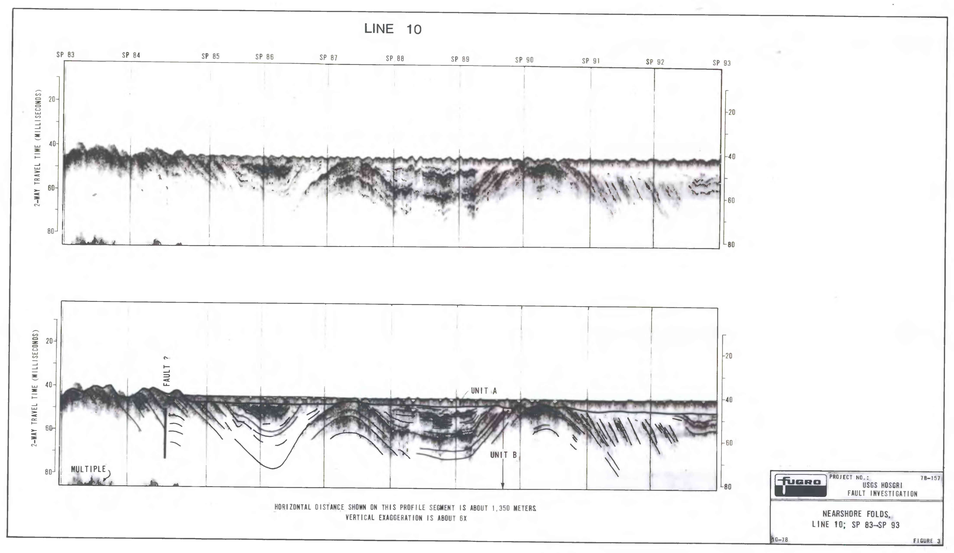
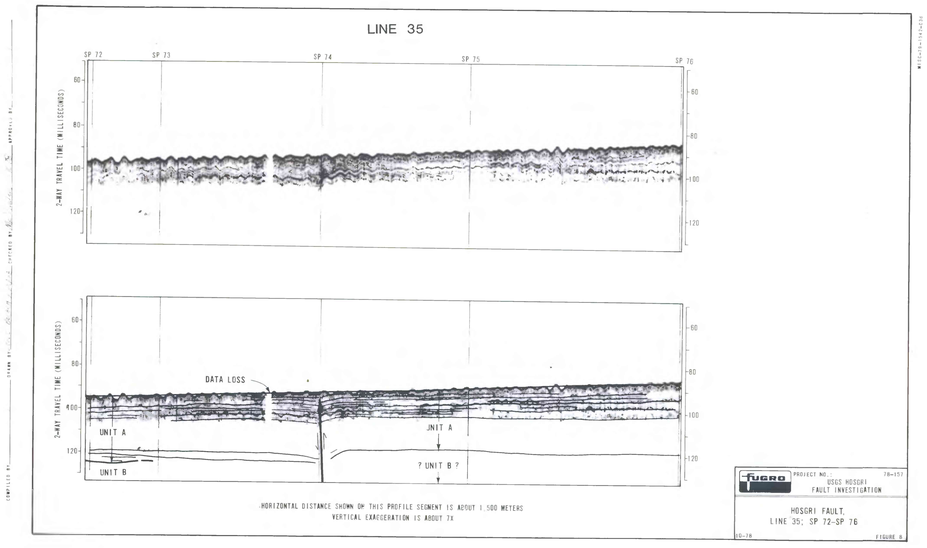

CAPE SAN MARTIN
SAN JOAQUIN VALLEY
COAST RANGES
AREA OF STUDY
TRANSVERSE RANGES
PACIFIC OCEAN
SANTA BARBARA CHANNEL
EXPLANATION
FAULT: ONSHORE, SOLID WHERE ACCURATELY LOCATED, DASHED WHERE INFERRED, DOTTED WHERE CONCEALED. OFFSHORE, ALL DASHED. BARBS ON UPTHRUST SIDE, U UPTHROWN, D DOWNTHROWN.
SYNCLINE: ONSHORE, SOLID WHERE ACCURATELY LOCATED, DOTTED WHERE CONCEALED. OFFSHORE, ALL DOTTED. ARROW INDICATES DIRECTION OF PLUNGE
ANTICLINE: ONSHORE, SOLID WHERE ACCURATELY LOCATED, DOTTED WHERE CONCEALED. OFFSHORE, ALL DOTTED. ARROW INDICATES DIRECTION OF PLUNGE.
NORTH
0 10 20 30 40 50
KILOMETERS
BATHYMETRIC CONTOURS IN METERS
Sources, Jennings,1977; Hoskins and Griffiths, 1971; Pacific Gas & Electric Co., 1975; Ziony and others, 1974
Fugro
PROJECT NO.: 78-157
USGS HOSGRI FAULT INVESTIGATION
GEOLOGIC STRUCTURE IN COASTAL CALIFORNIA BETWEEN CAPE SAN MARTIN AND SANTA BARBARA CHANNEL
10-78
FIGURE 1


LINE 102
SP 79
SP 80
SP 81
2-WAY TRAVEL TIME (MILLISECONDS)
520
540
560
580
600
HORIZONTAL DISTANCE SHOWN ON THIS PROFILE SEGMENT IS ABOUT 1,900 METERS
VERTICAL EXAGGERATION IS ABOUT 13X
Fugro
PROJECT NO.: 78-157
USGS HOSGRI FAULT INVESTIGATION
SUBMARINE LANDSLIDES, LINE 102; SP 79 - SP 81
10-78
FIGURE 10


LINE 41
SP 91
SP 92
SP 93
SP 94
SP 95 SP 96
SP 97
SP 98
SP 99
SP 100
SP 101
SP 102
SP 103
2-WAY TRAVEL TIME (MILLISECONDS)
120
140
160
180
UNIT A
UNIT B
HORIZONTAL DISTANCE SHOWN ON THIS PROFILE SEGMENT IS ABOUT 1,800 METERS
VERTICAL EXAGGERATION IS ABOUT 8X
Fugro
PROJECT NO.: 78-157
USGS HOSGRI FAULT INVESTIGATION
HOSGRI FAULT, LINE 41; SP 91-SP 103
10-78
FIGURE 9


LINE 10
SP 83
SP 84
SP 85
SP 86
SP 87
SP 88
SP 89
SP 90
SP 91
SP 92
SP 93
2-WAY TRAVEL TIME (MILLISECONDS)
20
40
60
80
FAULT ?
UNIT A
UNIT B
MULTIPLE
HORIZONTAL DISTANCE SHOWN ON THIS PROFILE SEGMENT IS ABOUT 1,350 METERS
VERTICAL EXAGGERATION IS ABOUT 6X
Fugro
PROJECT NO.: 78-157
USGS HOSGRI FAULT INVESTIGATION
NEARSHORE FOLDS, LINE 10; SP 83-SP 93
10-78
FIGURE 3


LINE 35
SP 72
SP 73
SP 74
SP 75
SP 76
2-WAY TRAVEL TIME (MILLISECONDS)
60
80
100
120
DATA LOSS
UNIT A
UNIT B
? UNIT B ?
HORIZONTAL DISTANCE SHOWN ON THIS PROFILE SEGMENT IS ABOUT 1,500 METERS
VERTICAL EXAGGERATION IS ABOUT 7x
Fugro
PROJECT NO.: 78-157
USGS HOSGRI FAULT INVESTIGATION
HOSGRI FAULT, LINE 35; SP 72-SP 76
10-78
FIGURE 8